

Sequence Listing

<110> Lightfoot, David
<120> Meksem, Khalid
<120> ISOLATED POLYNUCLEOTIDES AND POLYPEPTIDES RELATING TO LOCI
UNDERLYING RESISTANCE TO SOYBEAN CYST NEMATODE AND SOYBEAN SUDDEN DEATH
SYNDROME AND METHODS EMPLOYING SAME
<130> 1268/4/2
<150> 60/178,811
<151> 2000-01-28
<160> 122
<170> PatentIn version 3.0
<210> 1
<211> 87
<212> DNA
<213> soybean
<400> 1
gaattcatgg tttctttat gacattgttg ccaagtaata ctactatata aattcagatt
60
tgggtttctg ataaccgtgg tcgttaa
87

<210> 2
<211> 92
<212> DNA
<213> soybean
<400> 2
gaattcatgg tttctttat cttatgacat tggccaaag taatactact atataaattc
60
agattgggt ttcagataac cgtggcgaa
92

<210> 3
<211> 113
<212> DNA
<213> soybean
<400> 3
gaattccaa tatacgagt aatattattt taatgcttgc aaaaaaacat gataaaatgc
60
aaaaatttgg ggtgaatttt tacgacatta gtaaaaaaaaa catatccctt taa
113

<210> 4 <211> 135 <212> DNA <213> soybean <400> 4
ttaaaggat atgtttttt cactaatgct gtaaaaattc acccagattt ttgcattttc
60
tttggaaaaaa tgtactagat atatcatgtt ttttacaag cattacaata atattcactc
120

gtatattagg aattc
135

<210> 5
<211> 116
<212> DNA
<213> soybean
<400> 5
gaattccgt tatctcagac aactttgtt tggtttgggtt atagtaaaga cacgattatc
60

caggcttga gaggcataga aataattttt ttatataaaaa aaaaaaagtct cttaa
116

<210> 6
<211> 113
<212> DNA
<213> soybean
<400> 6
gaattccgt tatctcagac aactttgtt tggtttgggtt atagtaaaga cacgattatc
60

caggcttga gaggcataga aataattttt ttatataaaaa aaaagtctct tta
113

<210> 7
<211> 409
<212> DNA
<213> soybean - Forrest
<400> 7
gataaaaacc ttgcgtgtga tcggattac agtacgcagg gccaatcaac taaaatatct
60

gcaaacgata atataattat aagaaaaaga cacactttga gggcattttt gacttgagag
120

aactcaggta tcaatctaaa agcaacgctg ttcaccttga gctgaaacac ctggaggaga
180

aagcaaagca aaccaaacgc gagagagaaaa taaagaacgg aaacagagag agagagagga
240

aggaccttgc tcaaagcaac ggggacaact ttagagccct ggcgcgcgtg ggggtcaata
300

agcgttaacct ggctgaggag agcctcggcg tcgtccttgc tgaaggcagaa gaggaagagc
360

acgagaccaa gagaaactcc tcggaagcaa cggaaattgg tacgcagtc
409

<210> 8
 <211> 417
 <212> DNA
 <213> soybean
 <400> 8
 gagtaaaaacc ttgcgtgtga tcggattac agtacgcagg gccatggttt gagccaatca
 60

actaaaatat ttgcaaacga taatataatt ataagaaaaa gactcacttt gagggcattt
 120

ttgacttgag agaactcagg tatcaatcta aaagcaacgc tggcacctt gagctgaaac
 180

acctggagga gaaagcaaag caaaccaaac gcgagagaga aataaagaac ggaaacagag
 240

agagaggaag gaccttggc aaagcaacgg ggacaacttt agagccctgg cgccgtgg
 300

ggtcaataag cgtaacctgg ctgaggagag cctcgccgc gtccttgctg aagcagaaga
 360

ggaagagccc gagaccaaga gaaactcctc ggaagcaacg ggaattggta cgca
 417

<210> 9
 <211> 165
 <212> DNA
 <213> soybean
 <400> 9
 gagtaaatga aaatcgatca aaatcaaata atatatgctt ttttagttg tttcaagta
 60

actttttttt attgaaaaaa tcgacccaag ttgaaacaca tgtttgagaa ttgttttg
 120

catccaacgt tttcttgta caatcagctg tgagagggaa attgg
 165

<210> 10
 <211> 164
 <212> DNA
 <213> soybean
 <400> 10
 gagtaaatga aaatcgatca aaatcaaata atatatgctt ttttagttg gttcaagta
 60

ctttttta ttgaaaaat cgacccaagt taaaacacat gtttgagaat ttgtttgtc
 120

atccaaacgtt ttcttgta aatcagctgt gagagggaa ttgg
 164

```

<210> 11
<211> 114
<212> DNA
<213> soybean
<400> 11
gaattccag ctagattgt atcaaacatg tattgtccac aaaatgttca agcatcttag
60

ggaactgcta ttcttacttc taaattttt attgacatcc aaagtgtgct ttaa
114

<210> 12
<211> 114
<212> DNA
<213> soybean
<400> 12
gaattccag ccagattgt atcaaacatg tattgtccac aaaatgttca agcatcttag
60

ggaactgcta ttcttacttc taaattttt attgacatcc aaagtgtgct ttaa
114

<210> 13
<211> 3106
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 13
aatgggagga gtggaaaga cagtggctat ggagcttgtt ccggagggttg ggttggaatc
60

aagtgtgctc agggacaggt tattgtgatc cagttcctt ggaagggttt gaggggtcga
120

atcaccgaca aaattggcca acttcaaggc ctcaggaagc ttagtcttca tgataaccaa
180

attgggggtt caatcccttc aactttggga cttcttccca accttagagg ggttcagttt
240

ttcaacaata ggcttacagg ttccataacct ctttctttag gtttctgcct ttgcttcaag
300

tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc
360

actaagctt attggcttaa cttgagtttc aactccttct ctggccttt accagctagc
420

ctaactcact cattttctct cactttctt tctcttcaaa ataacaatct ttctggctcc
480

```

cttccttaact cttgggggtgg gaattccaag aatggcttct ttaggcttca aaatttgatc
540

ctagatcata actttttcac tggtgacgtt cctgcttctt tggtagctt aagagagctc
600

aatgagattt cccttagtca taataagttt agtggagcta taccaaatga aataggaacc
660

ctttcttaggc ttaagacact tgacatttct aataatgcct tgaatggaa cttgcctgct
720

accctctcta atttacccctc acttacactg ctgaatgcag agaacaacct cttgacaat
780

caaattccctc aaagtttagg tagattgcgt aatcttctg ttctgatttt gagtagaaac
840

caattttagtg gacatattcc ttcaagcatt gcaaacattt cctcgcttag gcagctttagt
900

ttgtcactga ataatttcag tggagaattt ccagtctcct ttgacagtca gcgcagtcta
960

aatctcttca atgtttccctt caatagcctc tcaggttctg tccccctct gcttgccaag
1020

aaatttaact caagctcatt tgtggaaat attcaactat gtgggtacag ccattcaacc
1080

ccatgtcttt cccaaagctcc atcacaagga gtcattgccc cacccctga agtgtcaaaa
1140

catcaccatc ataggaagct aagcacccaaa gacataattt tcatacttgc aggagttctc
1200

ctcgttagtcc tgattatact ttgttgtgtc ctgtttctt gcctgatcag aaagagatca
1260

acatcttaggc cggaaacggc caagccaccc gagggttagag cggccactat gaggacagaa
1320

aaaggagtcc ctccagttgc tgggtgtat gttgaagcag gtggggaggc tggagggaaa
1380

ctagtccatt ttgatggacc aatggctttt acagctgatg atctttgtg tgcaacagct
1440

gagatcatgg gaaagagcac ctatgaaact gtttataagg ctatggaa ggttggaaat
1500

caagttgcag taaagagatt gagggaaaag atcactaaag gtcatagaga atttgaatca
1560

gaagtcagtg ttcttaggaaa aatttagacac cccaaatgttt tggctctgag ggcctattac
1620

ttgggaccca aaggggaaaa gcttctgggt tttgatacat gtctaaagga agtcttgctt
 1680

ctccctaca tggaaaggttc gtgtgctgggt tctttcatta aagtgttgtg tgtgctggtc
 1740

tttaattata atttggagtt ttaccttagt aatctgtata attctaatacg gagaacagta
 1800

caaacaaaaa cacctaagga acaacacccctt anctttaataa taccatatca ataaagtgaa
 1860

atatttctt ggtcatcttgc atgcagggggg aactgaacat tcattattgg ccacaagatt
 1920

aaaatagccc aagccttggc ccgggcttgc ttgccttcattt tcccaggaga acatcataca
 1980

tgggacctcn catccagcaa tgtgtggctt gatgaaaaac aaatgctaaa attcagattt
 2040

tggtctttt cgggttgcgt tcaactgctg ctaattccaa cgtgatagct acagctggag
 2100

cattggatac cgggcacccctg agctctcaaa gctcaagaaaa gcaaacacta aaactgatata
 2160

ctacagtctt ggtgttatct tggtagaact cctaacgagg aaatcacctg ggggtgtctat
 2220

gaatggacta gatttgcctc agtgggttgc ctcagttgtc aaagaggagg ggacaaatga
 2280

ggtttttgtt gcagacttga tgagagatgc atccacagttt ggcgacgagt tgctaaacac
 2340

gttgaagctc gcttgcact gtgttgcattt ttctccatca gcacgaccag aagttcatca
 2400

agttctccag cagctgaaga gattagacca gagagatcag tcacagccag tcccggggac
 2460

gatatcgat agcacaaattt ttgcattgtt tttttgtgc caaatgttagt aggccctacta
 2520

tatatatgtt ctatgattct ttcatttta tattatttt gcctgttga atgcttgaat
 2580

ttgtacatac tcataactaca ataagggtgtt gttctgggtt atttacctc tacctcaaag
 2640

ctgggggtgtt attctgtttc ctccaaaggca cataatagttt gaaaatagttt ctcaggagca
 2700

ttcatttgcattt attctgtttc acggctgttca tcttctatgc atgccctgccc
 2760

cataaatgca ttatgaagaa ttgtaacggc tgtgttttg gacttcttca aaaagtttat
2820

gttattgcca ggtgtatata tcaacatgtt ttaaagattt tcaaacaatc aggttttaga
2880

tgtgggttg catgcatgag attggactag tgcgcttgat gtagtataaa atataaaatg
2940

tccaatcaag caccctctac atgtccaaat aatgggcctt atgaaactta attttttaat
3000

tacaaactac agtaatctt ttgaataaag atttacaaat tacaacngac atgtgaagcn
3060

gcatcttna ttgncaatct ttcaagttac tctattat tctgcn
3106

<210> 14
<211> 830
<212> PRT
<213> soybean
<220>
<221> misc_feature
<223> X is any amino acid
<400> 14

Asn Gly Arg Ser Gly Lys Asp Ser Gly Tyr Gly Ala Cys Ser Gly Gly
1 5 10 15

Trp Val Gly Ile Lys Cys Ala Gln Gly Gln Val Ile Val Ile Gln Leu
20 25 30

Pro Trp Lys Gly Leu Arg Gly Arg Ile Thr Asp Lys Ile Gly Gln Leu
35 40 45

Gln Gly Leu Arg Lys Leu Ser Leu His Asp Asn Gln Ile Gly Gly Ser
50 55 60

Ile Pro Ser Thr Leu Gly Leu Leu Pro Asn Leu Arg Gly Val Gln Leu
65 70 75 80

Phe Asn Asn Arg Leu Thr Gly Ser Ile Pro Leu Ser Leu Gly Phe Cys
85 90 95

Pro Leu Leu Gln Ser Leu Asp Leu Ser Asn Asn Leu Leu Thr Gly Ala
100 105 110

Ile Pro Tyr Ser Leu Ala Asn Ser Thr Lys Leu Tyr Trp Leu Asn Leu
115 120 125

Ser Phe Asn Ser Phe Ser Gly Pro Leu Pro Ala Ser Leu Thr His Ser
130 135 140

Phe Ser Leu Thr Phe Leu Ser Leu Gln Asn Asn Asn Leu Ser Gly Ser
145 150 155 160

Leu Pro Asn Ser Trp Gly Gly Asn Ser Lys Asn Gly Phe Phe Arg Leu
 165 170 175
 Gln Asn Leu Ile Leu Asp His Asn Phe Phe Thr Gly Asp Val Pro Ala
 180 185 190
 Ser Leu Gly Ser Leu Arg Glu Leu Asn Glu Ile Ser Leu Ser His Asn
 195 200 205
 Lys Phe Ser Gly Ala Ile Pro Asn Glu Ile Gly Thr Leu Ser Arg Leu
 210 215 220
 Lys Thr Leu Asp Ile Ser Asn Asn Ala Leu Asn Gly Asn Leu Pro Ala
 225 230 235 240
 Thr Leu Ser Asn Leu Ser Ser Leu Thr Leu Leu Asn Ala Glu Asn Asn
 245 250 255
 Leu Leu Asp Asn Gln Ile Pro Gln Ser Leu Gly Arg Leu Arg Asn Leu
 260 265 270
 Ser Val Leu Ile Leu Ser Arg Asn Gln Phe Ser Gly His Ile Pro Ser
 275 280 285
 Ser Ile Ala Asn Ile Ser Ser Leu Arg Gln Leu Asp Leu Ser Leu Asn
 290 295 300
 Asn Phe Ser Gly Glu Ile Pro Val Ser Phe Asp Ser Gln Arg Ser Leu
 305 310 315 320
 Asn Leu Ser Asn Val Ser Tyr Asn Ser Leu Ser Gly Ser Val Pro Pro
 325 330 335
 Leu Leu Ala Lys Lys Phe Asn Ser Ser Ser Phe Val Gly Asn Ile Gln
 340 345 350
 Leu Cys Gly Tyr Ser Pro Ser Thr Pro Cys Leu Ser Gln Ala Pro Ser
 355 360 365
 Gln Gly Val Ile Ala Pro Pro Pro Glu Val Ser Lys His His His His
 370 375 380
 Arg Lys Leu Ser Thr Lys Asp Ile Ile Leu Ile Val Ala Gly Val Leu
 385 390 395 400
 Leu Val Val Leu Ile Ile Leu Cys Cys Val Leu Leu Phe Cys Leu Ile
 405 410 415
 Arg Lys Arg Ser Thr Ser Lys Ala Gly Asn Gly Gln Ala Thr Glu Gly
 420 425 430
 Arg Ala Ala Thr Met Arg Thr Glu Lys Gly Val Pro Pro Val Ala Gly
 435 440 445
 Gly Asp Val Glu Ala Gly Gly Glu Ala Gly Gly Lys Leu Val His Phe
 450 455 460

Asp Gly Pro Met Ala Phe Thr Ala Asp Asp Leu Leu Cys Ala Thr Ala
 465 470 475 480

Glu Ile Met Gly Lys Ser Thr Tyr Gly Thr Val Tyr Lys Ala Ile Leu
 485 490 495

Glu Asp Gly Ser Gln Val Ala Val Lys Arg Leu Arg Glu Lys Ile Thr
 500 505 510

Lys Gly His Arg Glu Phe Glu Ser Glu Val Ser Val Leu Gly Lys Ile
 515 520 525

Arg His Pro Asn Gly Leu Ala Leu Arg Ala Tyr Tyr Leu Gly Pro Lys
 530 535 540

Gly Glu Lys Leu Leu Val Phe Asp Tyr Met Ser Lys Gly Gly Leu Leu
 545 550 555 560

Leu Phe Tyr Met Glu Gly Ser Cys Ala Gly Ser Phe Ile Lys Val Leu
 565 570 575

Cys Val Leu Val Phe Asn Tyr Asn Leu Glu Phe Tyr Leu Ser Asn Leu
 580 585 590

Tyr Asn Ser Asn Arg Arg Thr Val Gln Thr Lys Thr Pro Lys Glu Gln
 595 600 605

His Leu Xaa Phe Asn Ile Pro Tyr Gln Xaa Ser Glu Ile Phe Ser Trp
 610 615 620

Ser Ser Xaa Cys Arg Gly Asn Xaa Thr Phe Ile Ile Gly His Lys Met
 625 630 635 640

Lys Ile Xaa Gln Asp Leu Ala Val Ala Cys Ser Pro Ser Phe Pro Glu
 645 650 655

Thr Ser Tyr Met Asp Leu Xaa Ser Ser Asn Val Cys Xaa Xaa Asn Xaa
 660 665 670

Met Leu Lys Leu Gln Phe Trp Ser Phe Ser Val Asp Val Asn Cys Cys
 675 680 685

Xaa Phe Gln Arg Asp Ser Tyr Ser Trp Ser Ile Gly Ile Pro Gly Thr
 690 695 700

Xaa Ala Leu Lys Ala Gln Glu Ser Lys His Xaa Asn Xaa Tyr Leu Gln
 705 710 715 720

Ser Trp Cys Tyr Leu Val Arg Thr Pro Asn Glu Glu Ile Thr Trp Gly
 725 730 735

Val Tyr Glu Trp Thr Arg Phe Ala Ser Val Gly Cys Leu Ser Cys Gln
 740 745 750

Arg Gly Val Asp Lys Xaa Gly Phe Xaa Cys Arg Leu Asp Glu Arg Cys
 755 760 765

Ile His Ser Trp Arg Arg Val Ala Lys His Val Glu Ala Arg Phe Ala
 770 775 780

Leu Cys Xaa Ser Phe Ser Ile Ser Thr Thr Arg Ser Ser Ser Ser Ser Ser
785 790 795 800

Pro Ala Ala Gly Arg Asp Xaa Thr Arg Glu Ile Ser His Ser Gln Ser
 805 810 815

His Leu Pro Gly Arg Pro Leu Glu Pro Tyr Ser Glu Ser Tyr
820 825 830

<210> 15

<211> 726

<212> DNA

<213> soybean

<220>

<221> promoter region

<222> (1) .. (726)

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 15

gaatacgaat tccatTTcg cgacagtagc tcagaatagg ttcatactcc tgccatctt
60

gaggcggncatgcaacgtgtaagacttcaagggtgtctccatctatcctgccatgaaagt
120

caagtttcag gacaaggtaat gcagaattat ggaaaagcaa tctgactaag acaaaaagagc
180

ttcagagatt aacagaaaaat agtgagccag aaaaaagatt gcgagacaga aattggtcg
240

caacaaaaag ttgtctcttt tataattttt aattgaaatt ttcttaattt agctaacatg
300

acttcctacg gccacaattg cgttgcaga cactaaaaaa acttgatgtt gcagcaaaaa
360

ttacgttta tttattattg atgtcaatta tttaacagtt ttatgttagg ttataataaca
420

gttagttgat gcaaggaggct aaacatataat cagaaattga aaggcagggn tattacttct
480

tatccatata ctgattgagc gggtcctgaa gaatagcggg aaaaaacttca agcgccagag
540

acaatagttt tttcttttca aacagcgccat atgcaaaatttc ttccaaatctc aagcttcaat
600

tccttatcgta tcgaaccgga cttgntctgn tttnacctaataa tccccactcg gcattnatnha
660

acttntcccc actttccttt ntcttccta tcgccaccgg tcttctatnc ccgcccgtcg
720

naatct
726

<210> 16
<211> 649
<212> DNA
<213> soybean
<220>
<221> partial_cDNA
<222> (1)..(648)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 16
aggagtggga aagacagtgg ctatggagct tggccggag gttgggttgg aatcaagtgt
60

gctcagggac aggttattgt gatccagctt ccttggagg gtttggggg tcgaatcacc
120

gacaaaattg gccaacttca aggcctcagg aagcttagtc ttcatgataa ccaaattgg
180

ggttcaatcc ctcaacttt gggacttctt cccaacctta ggggggttca gttattcaac
240

aataggctt caggttccat acctctttct ttaggttctt gcccttgct tcagtctctt
300

gacctcagca acaacttgct cacaggagca atcccttata gtcttgctaa ttccactaag
360

ctttattggc ttaacttgag tttcaactcc ttctctggc ctttaccagc tagcctaact
420

cactcattt ctctcaactt tctttcttcaaataaca atcttctgg ctcccttc
480

aactctggg gtgggaattt caagaatggc ttcttttaggc ttcaaaattt gatcctagat
540

cataactttt tcactggtga cgttcctgct tctttggta gcttaagaga gctcaatgag
600

aattccctta agcataataa ggttagggga gctatccaa atgaaatnt
649

<210> 17
<211> 558
<212> DNA
<213> soybean
<220>
<221> partial_cDNA
<222> (1)..(558)

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 17
 aggantgggn aagacantgg ctattttagc ttgggtcccg gaggggtgggt tggaaatcaan
 60
 tgngctcaag gacaaggat tggtaaccaa ctnctttga aaggntttag ggggcgaaac
 120
 acccacaaaa atggcaact tnaaagnctc angaagctta atcttnatga aaaccaaaaat
 180
 ggggggtcaa anccntcaac ttttggactt ctttccaacc ttagaggggg tcaattattc
 240
 aacaataggn ttacagggtc catacctt tcttaaggt tctgccctt gnttcagnct
 300
 cttgacctca acaacaactt gctnacagga agcaatccct tatagtcttg ctaattccac
 360
 taagcttat tggcttaact ttgagnttca actnctttct ntgggnctt accaactagn
 420
 ctaactcact cattttctct cactttttt tntntttaaa aaaacaaaca tttntngntt
 480
 cccttctnac tcntgggggg gggaaaaaca annaaaggnt tcttaggnt tcaaaaaatg
 540
 atcctanaac ataacttt
 558

<210> 18
 <211> 794
 <212> DNA
 <213> soybean
 <220>
 <221> partial_cds
 <222> (1)..(794)
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 18
 aatgggagga gtgggaaaga cagtggctat ggagcttgg ccggagggtt ggttggaaatc
 60
 aagtgtgctc agggacaggt tattgtgatc cagttccctt ggaagggttt gaggggtcga
 120
 atcaccgaca aaattggcca acttcaaggc ctcaggaagc ttagtcttca tgataaccaa
 180
 attgggtt caatcccttc aactttggga cttcttccca accttagagg ggttcagtt
 240
 ttcaacaata ggcttacagg ttccataacct cttcttttag gtttctgccc tttgcttcag
 300

tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc
 360

actaagcttt attggcttaa cttgagttc aactccttct ctggccttta ccagctagcc
 420

taactcactc attttctctc acttttcttt ctcttcaaaa taacaatctt tctggctccc
 480

ttcctaactc ttggggnggg aatttcaaga atggcttctt taggcttcaa aatttgcattcc
 540

tagatcataa cttttnctg gtgacgttcc tgcttcttg gtagcttaa gagagccna
 600

tgagaattcc cttagtcatn ataagnnttag tggagcttcc caantgaaat anggaccctc
 660

tntaggctta aacactngnc attctaataa tgccttgaat gggAACCTCC ctgttccctc
 720

tttanttatac tcccttncnc ngctggangc cagaccaccn cntgncaatn aatccctcaa
 780

agttaggtac atcg
 794

<210> 19
 <211> 781
 <212> DNA
 <213> soybean
 <220>
 <221> partial_cds
 <222> (1)..(781)
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 19
 ggaggagtgg gaaagacagt ggctatggag cttgttccgg aggttgggtt ggaatcaagt
 60

gtgctcaggg acaggttatt gtgatccagc ttccctggaa ggggttttag gggtcgaatc
 120

accgacaaaa ttggccaact tcaaggcctc aggaagctta gtcttcatga taaccaaatt
 180

ggtggtaat cccttcaact ttgggacttc ttccaacctt agaggggttc aagttattca
 240

acaataggct tacaggttcc atacctttt cttaggttt ctgccttgc cttcaagtct
 300

cttgacactca gcaacaactt gctcacagga gcaatccctt atagtcttgc taattccact
 360

aagctttatt ggcttaactt gagttcaac tncttctctg gnccttacc agctagccctaa
 420

actcactcat ttctctcac ttttcttct cttcaaaaaa acaaacttac tgggtccttt
480

ctactcttgg gggggaaatt ccagaatggn ttcttttaggg ttnaaaatttgc atcctagaca
540

tacttttac tggggacgac ctgcttctt ggnagcttaa agagctaat gagattnct
600

tagcataata agttaggggg gcttnccaa agnaatagga nccttntag ggttaaaaac
660

ctggcatttt taaaatgcct tgaangggac ttgnccgctn cccctntaat tatccncctt
720

acnccgntgg anggagagaa aanccttg caaanaaaaac cctcaaaggta tagggngatc
780

g
781

<210> 20
<211> 861
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 20
gaatgggagg agtggaaag acagtggcta tggagcttgc tccggagggtt gggttggaaat
60

caagtgtgct cagggacagg ttattgtgat ccagcttcct tggaaagggtt tgaggggtcg
120

aatcaccgac aaaattggcc aacttcaagg ctcaggaag cttagtcttc atgataacca
180

aattggtggt tcaatccctt caacttgggg acttcttccc aaccttagag gggttcagtt
240

attcaacaat aggcttacag gttccataacc tctttcttta ggtttctgcc ctttgcttca
300

gtctcttgac ctcagcaaca acttgctcac aggagcaatc ctttatagtc ttgctaattc
360

cactaagctt tattggctta acttgagttt caactccttc tctggtcctt taccagctag
420

cctaactcac tcattttctc tcactttct ttctcttcaa aataacaatc tttctggctc
480

ccttcctaac tcttgggttg ggaattccaa gaatggcttc tttaggcttc aaaatttgc
540

cctagatcat aacttttca ctggtagacgt tcctgcttct ttggtagct taagagagct
 600
 caatgagatt tcccttagtc ataataaaagt ttaatggagc tataccaaat gaaataggaa
 660
 cccttctan gcttaaacac ttgacatttn taataatgnc ttgaatggga acttgctgc
 720
 taccctctnt aattatcctn cttacactgn tgaatgcaaa aaacaacctc ttgcaataaa
 780
 tcccttaaan ttangnnaat gggaaanttn tttntgattt gagtnaaacc aattaatggc
 840
 atattnntta acattnaaan t
 861

<210> 21
 <211> 761
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 21
 gaatgggagg agtggaaag acatggggtt gaaggcgtt acccacatag ttgaatattt
 60
 cccacaaatg agcttgagtt aaatttcttg gcaagcagag gggggacaga acctgagagg
 120
 ctattttagg aaacattgaa gggatttaga ctgcgtgac tgtcaaagga gactggaatt
 180
 tctccactga aattattcag tgacaaatca agctgcctaa gcgaggaaat gtttgcattt
 240
 cttgaaggaa tatgtccact aaattggttt ctactaaaa tcagaacaga aagattacgc
 300
 aatctaccta aactttgagg gatttgattt tcaaggaggt tgttctctgc attcagcagt
 360
 gtaagtgagg ataaattttaga gaggtagca ggcaagttcc cattcaaggc attattagaa
 420
 atgtcaagtg tcttaagcct anaaagggtt cttatccat ttggatagc tccctaaact
 480
 tattatgact aaggaaatc tnattgagct ctnttaactc ccaaagaaca ggacgtncca
 540
 gtgaaaaagt atnatctagg atcaaatttgc aacctaaaaa gcattttgga tccccccaaa
 600

gttaggaagga gcanaagatg tnttnaaaa anaaatanaa aatatagtag tactgtaagc
660

naaaaggtga ctaatagcat aantatgata caaatttagga tttcttanaa ttttttnaa
720

aatnnnnangn aaccaaaaaa gngacnncn tttnaanacc c
761

<210> 22

<211> 856

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 22

aatgggagga gtggaaaga cagtggctat ggagcttggt ccggagggtt ggttggaaatc
60

aagtgtgctc agggacaggt tattgtgatc cagttcctt ggaagggttt gaggggtcga
120

atcaccgaca aaattggcca acttcaaggc ctcaggaagc ttagtcttca tgataaccaa
180

attgggggtt caatcccttc aactttggga cttcttccca accttagagg ggttcagtta
240

ttcaacaata ggcttacagg ttccataacct ctttctttag gtttctgcct ttgcttcaag
300

tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc
360

actaagctt attggcttaa cttgagtttc aactccttct ctggccttt accagctagc
420

ctaactcact cattttctct cactttctt tctcttcaaa anaacaatct ttctggctcc
480

cttcctaact ctgggggtgg gaattccaag aatggcttct ttaggcttca aaaattgatc
540

ctagaacata acttttttac tggtgacggt cctgctttt ttggtaggct taaaganaag
600

ccaatgagaa ttcccttagt catnataaaag ttaaggggag cttnccaa atgaaaaaaag
660

gaaccctttn taggcttaaa nanacttgac aattntaat aatgcccttg aatngggAAC
720

ttgcctgcta cccccctttaa tttatcctac ttaccctgnt ngaaggcaaa naacaacccc
780

tttgcaataa aaaccnnaaa gttaagggga angnggnact ttntntctnn ttngggnaa
840

accantann ggcnct
856

<210> 23
<211> 826
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 23
gaatgggagg agtgggaaag acatggggtt gaaggcgtgt acccacatag ttgaatattt
60

cccacaaatg agcttgagtt aaatttcttg gcaagcagag gggggacaga acctgagagg
120

ctattttagg aaacattgaa gggatttaga ctgcgctgac tgtcaaagga gacttggatt
180

tctccactga aatttattcag tgacaaatca agctgcctaa gcgaggaaat gtttgcatt
240

cttgaaggaa tatgtccact aaattggttt ctactcaaaa tcagaacaga aagattacgc
300

aatctaccta aactttgagg gatttgattt tcaaggaggt tgttctctgc attcagcagt
360

gtaagtgagg ataaattaga gaggtagca ggcaagttcc cattcaaggc attattagaa
420

atgtcaagtg tcttaagcct agaaagggtt cctatttcat ttggatagc ttcactaaac
480

ttattatgac taanggaaat ctcattgagc tctcttaagc tacccaaaga agcaggaacc
540

gtcaccagtg aaaaaagtta tgatcttaga tcaaattttt aacctaaaaa accattctg
600

gaattccacc ccaagaatta ggaaggagc canaaagatt gttattttga aaaaaaaaaa
660

aaagtgagaa aaaatgagtg agttaggctt actggtaaaa ggaccaaaaa aagganttg
720

aaactnaaan ttaanccaat aaaacttaat ggnataaca aanacttttta nggaatttctc
780

tttnaacaat ttnttnctt angncaaaaa anttaancaa aggnct
826

<210> 24
 <211> 571
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 24
 tgggactggc tgtgactgat ctctctggc taatctcttc cagctgctgg agaacttcat
 60

gaacttctgg tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt
 120

ttagcaactc gtcgccaact gtggatgcat ctctcatcaa gtctgcataa aaaacctcat
 180

ttgtccactc ctcttgaca actgaggcaa cccactgagg caaatctagt ccattcatag
 240

acaccccagg tgatttcctc gtttaggat ctaacaagat aacaccaaga ctgttagatat
 300

cagtttttagt gtttgctttc ttgagctttg agagctcagg tgcccggtat cccaatgctt
 360

cagctgttagc tattcacgttg gaatttagcag cagttgacat caaccgagaa agacccaaat
 420

ctgcaatttt agcatttgna ttctcattaa acaacacaat gntggatgng anggtncat
 480

ggtgaaggt cttctngna agnaagnaaa acaaagcacc gggccaaggn ttgggctaat
 540

ttcaaccttg gggggcaaaac naanaaatgt t
 571

<210> 25
 <211> 727
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 25
 ttacaactag ttttatcgga gaataaaaaa ttgaagaata ataagttcag ctataataaa
 60

ctcgagggag gaaaaacaaa gaaattcatg ataaatagat ataacttatt aaatttaagg
 120

ggtgtatggcacaccctga attatagaga ttcttataatc tttgagaaaa taattaaatt
 180

gggaaaaaaag agataatgac tgattgagat ttgcctcaga attgttcgtt ttaatattgg
 240
 tacgaatcta atggtttat cctgaaagat gctcacaagt attgagggac taataaattg
 300
 tttataaaact actactaaat gagatgagac tttaaggtgt actgaagcaa tatcattaa
 360
 aaaatgacta ctcgtatttg tggtgagaaa atttatttc aatgaaaaga aaatatatac
 420
 atataagata aagtaattaa cataaccgaa aggaaataaa atgcaacatt ataaaaacta
 480
 caactatata aatgatatac acaactccta gcacatgcat tggattgtga attaattaa
 540
 atgttgtatg gatggtaaaa attcaaaact aaacccccc caatttaagt gacacagaat
 600
 ataattagcg gtggctttt tacagaaacg acgagaacaa aggtgtcaaa ggaaaggaga
 660
 tggatgcattg tggatgagc tcatncaatt ccaacctgtt gtggaccaaa gccgaagtcc
 720
 ttgacnn
 727

 <210> 26
 <211> 560
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 26
 attacgcnag ctctatacga ctcactatag ggagacaagc ttgcatgcct gcaggtcgac
 60

 tctagaggat ccccggtac cgagctcgaa ttcccaatgc cagagttcc ctatcgtgg
 120

 cccccacatat gaagaataaca cccacgttga aatacatgtt gttgtgttg gacgcgc
 180

 gcccagagtg ccggtccacg agtatcccc aacgtgcattt cgcatgcgt tgaaacctag
 240

 tattcatctt cctgatggag gcagccacgt gtccgacaag gtcaatgttg ccgtttcgt
 300

 gaaaaggat gataatgaaa ggcaccatat tgcgtggc gaggttgaaa atggcgctgt
 360

gcatgctctt gtaaggtgcc acgttgatgt agggagaac cttgactggc ccacttgagt
420

tgttggagta gtttcgaag gcttgcata tgtggtttgt gttgggttaa ttcacagaca
480

agaattttct gngaccgcgtg tctatgtttt atgggaagga gaatgggtgc cttttccccca
540

cnagctngat naggnggact
560

<210> 27

<211> 630

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 27

actgcatgca tgcaagcaaa tttaacttta cacaacacac caccagagtg taagctgttt
60

cataaaaaat gattgtttcg ggcttcgga tcacaaggct tgtttagtat tcggtaagaa
120

agaaagaaat aggtgataaa taaagtggat agaaacataa aagaaaggaa taaagtaatg
180

aaaataaggg agaagtagaa taatggaaat agataagaaa tagaatggat tcgatagttat
240

atctagttta agagaaataa gaaaaataa gaacaagaaa aaaaattgca tttaattta
300

ttatgttac tgtatcgatg attggcacga gattataagt ttttttttc gtgtttaccg
360

ttgaaggatt atatatcata ccattgttt gtcaaccaac acggaacttt aagtctcttg
420

atgttcaaaa gcacttaaaa ctaaggaatt ttacatcata ttagtcgtct gtagactgat
480

acaggatttt aagcctataat atctagcatt gatccggttg gcaatcaata tcacattaat
540

gatcggtaaa ccattcataat aaccctttg attggtaag aaatggcttt atgaatccca
600

ggattgagcc cagaancagg ngatactagn
630

```

<210> 28
<211> 756
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 28
atggcttaa cttagtttc aactccttct ctggccttt accagctagc ctaactcact
60

catttctct cactttctt tctcttcaaa ataacaatot ttntggctcc cttnctaact
120

gtgggggggg gaatancaag ggnggctta ggctgaaaaa tttgatccta gatcataact
180

tttcactgg tgacgttcct gcttcttgg gtagcttaag agagctcaat gagatttccc
240

ttagtcataa taagtttagt ggagctatac caaatgaaat aggaaccctt tctaggctta
300

agacacttga catttctaat aatgccttga atggaaactt gcctgctacc ctctctaatt
360

tatcctcact tacactgctg aatgcagaga acaacccct tgacaatcaa atccctcaaa
420

gttttaggttag attgcgtact ctttcctgtt ccgattttga gtagaaacca atttagtgga
480

catattcctt caagcatngc nnacatttcc tcgcttaggc agcttgattt tcactgaata
540

atttcaggtg gagaaattnc agtctncttt gacagtcagc gcagtcataa tcttcttcaa
600

tggtnctac aataggcctc tcagggtctg gcccccttt gnttggccaa ggaaanttaa
660

cttaagctta ttgggggggg aaanattcaa ctatgggggg acncggccct ttaaaccctt
720

gggnntttcc caggttcctt ccaagggngc anttgt
756

```

```

<210> 29
<211> 566
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 29

```

gacccttgtt ctatagaacc gaattcagac tcggtagccg gggatcctct agagtcgacc
60

tgcaggcatg caagcttatt attactacta ctacttatct tcactccacc acactgtgtc
120

actaaaaccg gaaccatccc catacaaaat tctactgaag acaacatatac ccccaatatt
180

cccaatgcat cagcggtctc catgaaagtt gtcatttctt ttccattcaa agatccatca
240

ttgtggcgcc ttcccaccat cacaagatca tagtttcctt ccaaactatg cactgcttcc
300

aacacctcca ccccatcgac caccgtatac tcgtaccaac aaacgttacc aatgccatata
360

ttcatgctct tgaactcgac aattaacccc tcgtccaaca tggtatcttc ctcttcctct
420

tcacgctctt ctcttgcaaa ataattttac aaccacacgg tttcttggtc acgataacaa
480

acctaaacaa gctaccctcg tatctgcacg ctccgcattc gaattcccaa tgccagagct
540

tccctatcg gggncacc tatgaa
566

<210> 30

<211> 673

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 30

gggactggct gtgactgatc tctctggct aatctttcc agctgctgga gaacttgatg
60

aacctctggc cgtgctgatc gagaaggatc aacacagtgc aaagcgagct tcaacgtgtt
120

tagcaactcg tcgccaactg tggatgcac tcctcatcaag tctgcataaa aaacctcatt
180

tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
240

caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgttagatatac
300

agtttttagt tttgctttct tgagctttg agaagctcag gtgccccgtt tcccaaatgc
360

ttccagctgt agcttatacac cggtggaaat taagcagcaa gttggacatt caacccggag
 420
 naaaaagaccc aaaaattttg caaatttttta agcaatttng gnanttcttn aatcaaggcc
 480
 aaccaccaat tggnttggga atgggtggaaag ggtttcccca atggtaatttgaagggtttc
 540
 ttccctnggg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaaggt
 600
 nttttggggg ctttattttt tncnaatncc ctttgggnngg ggnccaaat tcnaaantgg
 660
 aaattggntt tnn
 673

<210> 31
 <211> 736
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 31
 gttgnntagn tgcactatag aatncgaatt caatttaaac attttaatt ttttgtctt
 60
 gtattctatt ttttcataaa ttctaatctt gctaataatt tcaattcata ttaagatcgg
 120
 taaatagaaa atctagaaaa aaaaacaaaa aaagtatttt ttttcatttgc attttatttt
 180
 caattgattt gtcactaaca aactgattcc tcttaaatct cacaaggta catgtcgata
 240
 taaatatgag attataaatt catgatatct attttcgatt tttacatata atgtttttt
 300
 tatctttttt agttcctaatt aagcattttt aaatgtctta tgttcctact ttgcataatca
 360
 gggaccatt aatgggacga ggtcaactgctg agcatgaaca acgtgtctt cgtctccgaa
 420
 acaacgtgcc atcttgcagg ctcaccaccc tggaaatccct ggagtggtca ccactgattt
 480
 tccggggaaa gcccggcggt gaaagttga ttacaccggc aatgtgagcc ggtcgctgt
 540
 gcaaccctgg tnccgggaca aangcacacc aagttgnaan tttgggtccg aggggngcca
 600

naattgggt tgcaangata ctaagcnntt ggnacttnc ctggnaacc caccctaatt
660

nccatnttc aatgggnac cnaatttctt acaattggnt gcaananggg nttnnggn
720

aacctttnna ccccca
736

<210> 32
 <211> 566
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 32
 gacnnagac gctactatag ggagacaagg tattcgaagg ggaactgaga acgatccaa
 60

gcactccaag aaacagagag tttcacattt tttgttgtgt acataatgaa gcaaacgtgc
120

gtggcatcac tgcattatta gaagagtgc acccagtgc agagagcccc atatgcgtct
180

acgcagtcca ccttatcgag ctgcgtggga aaagtgcacc catttcctt cccataaaac
240

atagacacgg tcgcagaaaa ttcttgcgt tgaattaccc caacaccaac cacatcatgc
300

aagccttcga aaactactcc aacaactcaa gtggccagt caaggttctt ccctacatca
360

acgtggcacc ttacaagagc atgcacgacg ccattttcaa cctgcggccaa gacaatatgg
420

tgccttcat tatcatccct tttcacgaaa acggcaacat tgaccttgc ggacacgtgg
480

ctgcctccat caggaagatg aatacttagt ttcaagcgca tgcgcattgc cgttgggat
540

actcgngggcc ggnactctng gtgggn
566

<210> 33
 <211> 614
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 33

acaacaagca acgaacagct tttaaccctta aactaggcaa atgccaatat taaacaacaa
 60
 ataattaaaa ttgttaaggct ggtcgagttt aaattaaaca aaaggccctc tattcaaacc
 120
 ttcatatatac atacctgntt ttaattaacg cggactactt tttcatataa aaaaaagatc
 180
 attagaggat taatttaaag cgnnttagtt tttaattacc aaagagtata attattatta
 240
 ggcgctttgg cccacaatca atcacctaaa caagaaaaag aaaaagaaaa aaaaaggcaa
 300
 attggactaa tgcaaaaagtg gcacaatctt tgncttgaac tctttatataa gcaacaaatn
 360
 atactcttct gcacaaatca caagaatacc ttacatgaaa agaatggnaa tntgacgggt
 420
 tacattaaat tataatgcagg tttctgcagg gaatcaattn tcaagaattt aaggggggggt
 480
 gggaaattttc aatagctagc ttgacttagca aagggaaaga ataaaggnaa aangcttctt
 540
 ggctnggcct tttggganng gnatcctttt ngctaaaccg gaaanggnta tangaatgg
 600
 aaaggagana atcg
 614

<210> 34
 <211> 602
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 34
 aggcttagctg gttaaggacc agagaaggat ttgaaactca agttaagccaa ataaagctta
 60

gtggaattag caagactata agggattgct cctgtgagca agttgttgct gaggtcaaga
 120
 gactgaagca aagggcagaa acctaaagaa agaggtatgg aacctgtaag cctattgttg
 180
 aataactgaa cccctctaag gttggaaaga agtcccaaag ttgaaggat tgaaccacca
 240
 atttggttat catgaagact aagcttcctg aggccttgaa gttggccat tttggcggtg
 300

attcgacccc tcaaaccctt ccaaggaagc tggatcacaa taacctgtcc ctgagcacac
360

ttgattccaa cccaacctcc ggaacaagct ccatagccac tggcattcca gctcccgcaa
420

gaacccttct ggatcagcca actcttgctt gaaagcttat cacatgtacc tctctacaga
480

taggagggtg cttttccct ttcactggnc tacctttcg ggaataagcc acctaattgag
540

aaagaagan ctgggatagc taactctaca tagnctcaag gcnaagagata attagggaaa
600

ng
602

<210> 35

<211> 644

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 35

ggaattttga agagaagtaa agtgagagaa aatgantgan nnaggctagc tggtaaagga
60

ccagagaagg atttgaaact caagttaagc caataaagct tagtggatt agcaagacta
120

taagggatttgc ctccctgtgag caagttgttg ctgaggtcaa gagactgaag caaagggcag
180

aaacctaaag aaagaggtat ggaacctgta agcctattgt tgaataactg aaccctctaa
240

aggttggaa gaagtcccaa agttgaaggg attgaaccac caatttggtt atcatgaaga
300

ctaagcttcc tgaggccttgc aagttggccaa attttggcgg tgattcgacc cctcaaacc
360

ttccaaaggaa gctggatcac aataacctgt ccctgagcac acttgattcc aacccaaacct
420

ccggaacaag ctccatagcc actggcattc cagctccgc aagaaccctt ctggatcagc
480

caactttgc ttgaaagctt atcacatgta cctctctaca gataggaggg tgcttcttcc
540

ctttcactgg nctacctctt cgaaataag ccacctaattg agaaagaaaag anctggata
600

gctaactcta catagnctca aggcnagaga taattaggga aang
 644

<210> 36
 <211> 748
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 36
 atggcttaa cttgagttc aactccttct ctggtcctt accagctagc ctaactcact
 60

cattttctct cactttctt tctcttcaaa ataacaatct ttctggctcc cttcctaact
 120

cttgggttgg gaattccaag aatggcttctt ttaggcttca aaatttgatc ctagatcata
 180

actttttcac tggtgacggtt cctgcttctt tgggttagctt aagagagctc aatgagattt
 240

cccttagtca taataagttt aatggagctg taccaaatga aataggaacc ctttcttaggc
 300

ttaagacact tgacatttctt aataatgcct tgaatggaa cttgcctgct accctctcta
 360

atttatccctc acttacactg ctgaatgcag agaacaacct ctttgacaat caaatccctc
 420

aaagtttagg tagattgcgt aatcttctg ttctgatttt gggtagaaac caattttagtg
 480

gacatattcc ttcaaggcatt gcaaacattt cctcgcttag gcagctttagt ttgcactgaa
 540

taatttcagt ggagaaattc cagtctcctt tgacagtcaa gcgcaagtct aaatctcttc
 600

aatgttcctt acaatagcct ctcanggtct gncccccctc tgcttgccaa gaaatttaac
 660

tcaagctcat ttgtggaaa tattcaacta tgtggacag nccttcaacc ccatgttttn
 720

ccaagcttca tacaaggagc atggccct
 748

<210> 37
 <211> 563
 <212> DNA
 <213> soybean
 <220>

```

<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 37
ctggctgtga ctgatctctc tggctctaattc tcttccagct gctggagaac ttgtatgaact
60

tctggtcgtg ctgatggaga aggatcaaca cagtgcaaag cgagcttcaa cgtgttttagc
120

aactcgtcgc caactgtgga tgcattcttc atcaagtctg catcaaaaac ctcatttgc
180

cactcctctt tgacaactga ggcaacccac tgaggcaat ctagtccatt catagacacc
240

ccaggtgatt tcctcgtag gagtttaac aagataacac caagactgta gatatcagg
300

ttagtgtttg ctttcttgag ctttgagagc tcaggtgcc ggtatccaa tgctccagct
360

gtagctatca cggttgaatt agcagcagtt gacatcaacc cgagaaagac caaaatctgc
420

aatttttagca tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat
480

gatgttctcc tggaaatgaa ggcagaacaa gccacggcca agcttggcta tttcatcctt
540

gtggccaaatc aatgaatggt cat
563

<210> 38
<211> 623
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 38
gattttgcac atctacttga gtaggctca catgattccg tgtattactt ttatttgg
60

atataatacca tgtggagttt agtatactt tttgtcctac aaccacattt tatgagactt
120

gcattttatg tgacatgaac ataaaaaaata atgaaaaaga aaatgtcaca tatatatgat
180

acaatctttt taaaagtcaa tttgaataat tttcatcag gagaaaaaaag aagagagaaa
240

atgaatataag tttcttctaa aaataaaaat caacttataa aaagaaaaaa ctttaatgaa
300

```

aaaaattcaa aaagaaaaag aataaaatga tcaatagcct ttaggtttaa gcacaaggta
360

aatccaaata aagacccaa aagatagtc agaacccaac aatggtaaaa tctagaaata
420

tacatgtaaa gactgcattt atagaccatc atgactagca aatgctaaa ggcacataga
480

tgaattaatc tatgcaacaa aatctgnccc aagtttttt tangcaagga aaatcatatc
540

attttattaa ggataactga gaggaccaat ggtgtaatca attgaaatca tgcgaggctt
600

acatgaaatc tgcaccaag tac
623

<210> 39

<211> 785

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 39

caatttaggaa ataaatataat tgaaaagaat tggtagtcag ttcaatgaaa gtgaggcct
60

caaacaactt gatgcagcan ctgtatgata caaaatataat taataactac accagcagaa
120

aaatataatgt caatctataat ttgggaacca aataatattt aatttgtatc tgatagactc
180

aagaaattat aactaatttgc aagaaaatgg atacctagta ttattaaaac accaaaacac
240

agggcagatt atagtagcta aagaggaaga agctaactag tcaaagtgtc acactattca
300

acactacaaa ggaccaatcc ccttttagag agcctgaccc ttctcacccca agagctaccc
360

aagagaatac acaccctctc ctccatatacc cctcccatat aacacaatcc tcaccaacta
420

agcacctacc tgacaattcc ctcctaacc aactctctgct catcagggtt gattctcttc
480

tctttccaag actttggct tttgtttga ctaagccaaa tttctatctg ctggcctgg
540

ccaacagtat cttttacaga caagttaca aaatattcgt atttggtaga atttattgat
600

attcctatta tggtccccac tgtgtgcaa cattagaaa ctaatattac aattaacagt
660

ttttggtaa tgcagcaaaa ctaaatatat ttgatataga aatcaacaaa ctgaaaatt
720

atatngcaag gncaattgga aaagaaaatt gataccctt ttgngnaat aaatatantg
780

nntac
785

<210> 40

<211> 640

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 40

tggaaaggcgt ccttcaattc aatcacaag tctaaatcaa agacgagggg gctgaaatca
60

tgggggacat tgacaacgta aggtaaccac taattaatta accactaata ttatcccatt
120

aatatccat taagagataa tacatataga gccaataaat aagcatctta acaagacaaa
180

taaattatcc attattcagc ttatgcccatt ggtggatttta gaagtttagg aaaaaaaaaat
240

tcatcatttg gcaattttgg gtcatttagc ttgaattggg tacaaggtgt ggtatggact
300

tttttctttt cttttctcta aattcttcct tctatgatat actttggc aacttaaact
360

caatttctta tagctcaata tttggattt agattggaaa tatctaaaag ncacttaaat
420

tttatattta caaaaaaaaaaaa aaaagcatcg ntcttttct ttttataaca aagggggatc
480

aaaatcactc ttttatgaa tccgcattat ccttnataat aattaacctc cactgggatt
540

taaaggngta ttaattaaat ccggaggcca tggaggata tggggaaacc taatctaaaa
600

ntncatcctc aaccctaang ggaaaataaa ggaatngggg
640

```

<210> 41
<211> 808
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 41
cttttgacac tatgaatacg aattcaaata ttaaatattt ttatttttg tctttgtatt
60

ctatttttc ataaattcta atnntgctaa taatttcaat tcatattaag atcggtaaat
120

agaaaaatcta gaaaaaaaaaa caaaaaaaagt atttttttt cattgatttt atttcaatt
180

gatttgcac taacaaactg attcctctta aatctcacaa aagtacatgt cgatataaaat
240

atgagattat aaattcatga tatctatTTT cgattttac atataatgtt ttttttatct
300

tttttagttc ctaataagca tttttaatg tcttatgttc ctacttgca tatcagggac
360

ccattaatgg gacgagggttc actgcgagca tgaacaacgt gtcttcgtt ctcccgAAC
420

acgtgtccat cttgcaggct caccacctcg gaatccctgg agtgttcacc actgattttc
480

cggggaagcc gccgggtgaag tttgattaca cggcaatgt gagccgttc ctgtggcaac
540

ctgttcccg gacaaaggca cacaagttga agtttgggtc cgagggtgca gattgtgttgc
600

caggataacta gcattgtcac tcctgagaac caccctatcc atcttcatgg gtcgatttct
660

acattgttgc agagggtttc gggaaattcg acccaaagaa agatccgcga aattcaacct
720

tggtggatcc ctttgaaaaa acacagtggc tggcctgtaa atggatgggc aagtattcga
780

tttggggct gataaccnA gtaaatnt
808

<210> 42
<211> 605
<212> DNA
<213> soybean
<220>
<221> misc_feature

```

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 42
 ctcccgggtc ccaagtaata ggcccctcag agccaaaaca ttgggggggc taattttcc
 60
 tagaacactg acttctgatt caaattctct atgaccttta gtgatcttt ccctcaatct
 120
 ctttactgca acttgacttc catcctccaa aatagcctta taaacagntc cataggtgct
 180
 ctttcccatg atctcagctg gtgcacacaa gagatcatca gctgtaaaag ccattggtcc
 240
 atcaaaatgg actagttcc ctccagcctc cccacctgct tcaacatcac caccagcaac
 300
 tggagggact ccttttctg cctcatactg gccgctctac cctcggtggc ttggccgntc
 360
 ccggccttag atgntgatct ctttctgatc aggcagaaaa gcaggacaca acaaagnata
 420
 atcaggacta cgaggagaac tcctgctact atgagaatta tgnctttggg gcttagcttc
 480
 ctatgatggg gatggttnga cacttcanga gggggggcaa tgactccctg gganggagct
 540
 tggaaagac atgggggtga aggnctgnac ccacataggn gaaaaattcc cacaangag
 600
 cnngn
 605

<210> 43
 <211> 275
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 43
 ctgaacggaa gtgactgcgt ttgtgtcggt tgtaaggcagg gagtgaggc attataggtc
 60
 tcggtttgc tcttactcc tttggcacga tggtgagaat gcttattgtg gtgattcggt
 120
 gatttgatt cgagtatggc ggtttagtg gtgttgcga aggcaaggat ttggcggt
 180
 tggtaacgcac ggcggccat gtagtagcgg gaagggtggct ggtcncgggt gattaagacg
 240

tcggcggttt gcccgggggcc cactatgagg acttt
 275

<210> 44
 <211> 632
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 44
 tgtatataat taaaatgagt ttaatattta tgtattaata gtataaaatt tatcatacat
 60

gatgaatggt gaaattttga attatgatta aataattata taaaaaaatt tacatgatga
 120

atgaataact tttttttct caattaaat tatgatcctt tgtcgatatg ttttactgtg
 180

tcgacctttt ttttcggggg agaggggacc agtaggagaa gtagtattta gtaaaagaag
 240

ggagagagaa gttgacttat ccttaatta gtttagagaa aattagacga gaaggaaaaa
 300

aaataggcga aagtcacttt ttctttctat ctctaccaag aatgttgatg aaaaagtggg
 360

gagcagaatt ttaaattttt attttcatat ttatccttct ccacattttt ggtttcttcc
 420

attttttat aaaatgattt attttagggc ataggttaact tttcaatttt tttcattcta
 480

ttcgatcaaa taaatagaaa aataattac ttttctttct tttaaccttt ttcatatttc
 540

tctcataacg accacttatt aattacctct ttnccccac ttttgctat ncaaatctat
 600

ctttgaattt cttcctttc attttggtct cn
 632

<210> 45
 <211> 650
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 45
 ttcacagaca tagcaaaatt ctgaagtaag aagcaagttc acgtgtgatg gcgaaaccca
 60

ttatagaata tgttagactg aaaggttaaca aattaaaata tgtttattg cagaaaccat
 120
 aaactaataa acctttggg tagatagaaa agtgataaat catacataat aataactgaa
 180
 atactcagct ttaatcaat ttaattcaat atatatctat ttttgaattt ttcaaagaga
 240
 tgcttagcta gggaggaaac ctaatttagt ataaaaaaaaaa gaaacaaatt aaaaacataa
 300
 attgccattg aatgcctctt aaaatattcc gatccattga tgtctacata ataatatata
 360
 ttattgatat aataaccgat tgaataaaat ggatatacct attacgtaat agcagattt
 420
 tctacgcaa agagacagtc aaaggtgcta attagaaatt aatcgccccca taataaaatt
 480
 ctaaaccttt gaaaagataa atcaattctc aaaaagattt attttactta tctcagtacc
 540
 atgcaccatg gatcatctta ctggtctggc tangaattt caaagctacg ccacaaattt
 600
 aaattgggct aaaaatcaa catgcatggt gtcacaacta tattactagt
 650

 <210> 46
 <211> 628
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 46
 gaatgcacat tttataaacg tggatgcct ctcccggnng ggggaccaat taataaggta
 60

 ccctgttgcc cctagggac attggatggc catcagatgg tgcataataca caccaaagtt
 120

 tatacagcat tatagtgact ttcaacactcc tcactccgag gtcccccata attctctcta
 180

 ttgaacttgc aaagactaat gaacttatga agactatcac tgaaacccac tatggaagcc
 240

 ccagtagtaa aatggncatg catgctcacc aaaagtttat acagcattat agcgacatac
 300

 gacctcactc ccaggnccac atgctctatn gaacttctaa agctatctn gaaccctatt
 360

atagcttcat gagggtaaca tgcattttag cgacttagaa aactacatat cattgagcgt
 420
 gatcnttaag aaggcctcat tttgacacaa aagaacatga tggatttgcc tttatattcg
 480
 gttactaacc ttgatagcta ttttggncag agagaaaaat attgacatgc ccgnggaatc
 540
 aaaaggtaga taatnattaa agagataaag aactatcccc ttgctagggg naaaaaaaaaa
 600
 ntatatccct atttaaataa aanccatc
 628

<210> 47
 <211> 736
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 47
 tgggtatat aattaaaatg agttaatat ttatgtatta atagtataaa atttatcata
 60
 catgatgaat ggtgaaattt tgaattatga ttaataatt atataaaaaa atttacatga
 120
 tgaatgaata acttttttt tctcaattaa aattatgatc ctttgcgtat atgttttact
 180
 gtgtcgacct ttttttcgg gggagagggg accagtagga gaagtagtat ttagtaaaag
 240
 aaggagaga gaagttgact ttcctttaa ttagttaga gaaaattaga cgagaaggaa
 300
 aaaaaatagg cgaaagtcac ttttcttc tatctctacc aagaatgtt ataaaaaagt
 360
 ggggagcaga attttaaatt tttatttca tatttacatt tctccacatt tttgtttct
 420
 tccattttt tataaaatga tttattttag ggcatagttt actttcaat tttttcatt
 480
 tctattcgat caaataaata gaaaaataat ttactttct ttcttttaac cttttcatat
 540
 ttctctcata acgaacaact tattaattta cctctttcc cccactttg tctatccaaa
 600
 ttctatctt gaattttctt cctttcatt ttggttctca acccaaataa agaagaacga
 660

gtttggataa atcataaagg ttatatacc tataantgga agaacattta aatggtccaa
 720
 ngggccttaa aattct
 736

<210> 48
 <211> 695
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 48
 atgccagagc tttccttatac gtggcccccac ctatgaagaa tacaccacg ttgaaataca
 60

tgttgtgtt gttggacgca cccagcccgaa gagtgccgggt ccacgagttt ccccaacgtg
 120

catggcgcat gcgcttggaaa cctagtattt atcttccttga tggaggcagc cacgtgtccg
 180

acaaggtaa ttttgcgtt ttcgtgaaaa gggatgataa tgaaaggcac catattgtct
 240

tgggcgaggt tgaaaatggc gtcgtgcattt ctcttgcattt gatgttaggaa
 300

agaacatttga ctggccact ttagttgtt gaggatgtttt cgaaggcttgcatgtatgg
 360

tttgttgtgg ggttaattcac agacaagaat ttctgcgac cgtgtctatg ttttatggaa
 420

aggagaatgg gtgcactttt cccacgagct cgataaagggt ggactgcgtt naccatatgg
 480

gctcttttgc actgggttgc actcttctaa taanggcagn gatgccncnc nccgtttgt
 540

tnattatgttta cncaacaaac aatngaaac tctctgntttt ttgggagngc tttggatcgn
 600

tctcanntnc ccttnnaata anctttntnn ggnactttnn agggcgangc ttnnnncnata
 660

tgnataaccaaa gggngntacn annnnnngnt ntaan
 695

<210> 49
 <211> 625
 <212> DNA
 <213> soybean
 <220>

```

<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 49
tttcccacaa tcttaatct tgctaataat ttcaattcat attaagatcg gaaaatagaa
60
aatctataaa aaaaaacaaa aaaagtattt tttttcatt gatttattt tcaattgatt
120
tgtcactaac aaactgattc ctcttaatc tcacaaaagt acatgtcgat ataaatatga
180
gattataaat tcatgatatac tatttcgat tttacataat aatgtttttt ttatctttt
240
tagttcctaa taagcatttt taaatggctt atgttcctac tttgcataatc agggaccat
300
taatgggacg aggttcactg cgagcatgaa caacgtggct ttcgttctcc cgaacaacgt
360
gtccatcttg caggctcacc acctcgaaat ccctggagtg ntcaccactg atttccggg
420
gaagccgccc gtgaagtng attacacccg gcaatgtgag ccgntcgctg gggcaacctg
480
ntccgggac aaaggcacac aagttgaagt ttgggtcgag ggngcagatt gggntgcan
540
gatactagca ttgcactcct gagaaccacc ctatccatct tcatgggac caattctaca
600
ttggtgcaga nggttccggg aacnc
625

<210> 50
<211> 621
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 50
actgggtgtac gatttgtgt tactagctat cccatgtaat aaatataaa atcttgaatc
60
acaaggaatg atgcaatata tggttcctct aatagtaagt tatcccacca aatctgaata
120
taatataagaa gttgtattcg tctgaatgtt gtgtctaaaa gggttgattt atgaatgtg
180
gctacatgtg agagttgtat aacaacagct agctagccat tagccaagcc actaactaga
240
.

```

cattagttt ggttgggtgt cagacaaacc gttagacctg agaacgaaag cgtattaaac
 300
 aaaagatgat atgttagactt ttaatataaa aagagatgga gaaaccaaat tgagattga
 360
 taggtgaact ataaatcatg acagtgcatt agacaagttg gtagagttt gttactaactc
 420
 atcagattct taagaaaggc aaaaatagaa actacaccac atgtcgctag cgataacgtg
 480
 caatttataa ataaataatg gcttcatttt catggtagt tataaattaa tgggtcaca
 540
 ttcttaattt attaggaacg tatacttcat tttgagatgt tataaagttg gaagaagaaa
 600
 agggatatag aaagaataaa a
 621

<210> 51
 <211> 480
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 51
 aagctccgcn cggggAACCT nnagagtcta cctgaatccc caagntngaa cgaataacttg
 60
 ccaacacaaa tacgggcgat gggaaacatc tgaagaccgc tccaaagcgc cncatactaa
 120
 attgnnagga aaatttataat ctgacctttc atgggtgggg ggtgcacatctg ctataaggaa
 180
 gggttcattc tgggcaagat ctgtggaaaa caatattgg gatcaaattt tagggagatga
 240
 tgctacaacc tcttcattat acatggattc tgaaataagt ggtgtgaact ttaaagtga
 300
 cgaagacggc atgcaaatgc ctggattca tctagttgat ttatttggaga ctgacacc
 360
 tacaagcggc gataaacatg attccacta tcatgaagng ccatcatctt atgggtttga
 420
 gggcttacga cgatccaaac gtaggaacat acaacctgaa ccgtactct gattgggg
 480

<210> 52
 <211> 480

```

<212>  DNA
<213>  soybean
<220>
<221>  misc_feature
<223>  n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400>  52
aagctccgcn cggggAACCT nnAGAGTCTA CCTGAATCCC CAAGNTNGAA CGAATACTTG
60

ccaacacaaa tacgggcgat gggAAACATC tgaAGACCgc tccAAAGCGC cncataactaa
120

attgnnagga aaatttataat ctgaccTTTC atgggtgggg ggtgcATCTG ctataaggaa
180

gggttcattc tgggcaagat ctgtggaaaa caatattggg gatcaaattt tagggagtga
240

tgctacaacc tcTTcattat acatggattc tgaAAataagt ggtgtgaact ttaaagtgaa
300

cgaagacggc atgcaaATgc ctggTattca tctagttgat ttatttgaga ctgacaccaa
360

tacaagcggc gataaacatg attcccacta tgaTGAAGNG ccatcatctt atgggtttga
420

gggcttacga cgatccaaac gtaggaacat acaacctgaa ccgntactct gattggggga
480

<210>  53
<211>  736
<212>  DNA
<213>  soybean
<220>
<221>  misc_feature
<223>  n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400>  53
aatttattta gttgatataaa ccacttcaa aaatctgact tacaagactc tttagaattc
60

ataatagtga cacttgatta agttgatTTT aacacgagtt tgatTTTTT
120

tttaataata attaaggTTc tagCTTtatAT atattatata gttgatatag actactttca
180

aaagtctgac ttAAAAGTCT CTTAGTATA cataataata taacCTTTA atttAGTTAA
240

aaaatttgc cctaaataaa ttaataaATC caaacttata tacaAGTTAA taggCTTAAG
300

tcttaaaaaaa ataataatata tatatatata taaAGCATTAA aaacATTCA atgAAAACAA
360

```

tataataata ataataataa atatattatt gttattaatt catagatttt attattacta
 420
 ttatagaata atttgtgtgt atatatataa atatatacag agagagaggg tcattttata
 480
 tgagtgagaa aatttaaata ttattatgaa ttttcaaaat taaaatcaca tgccatatga
 540
 ttttcttaaa aaattacgta actttttttt ttacaaaagt aatcatatgg ttttaaaaac
 600
 taatttaaat aacttatata taactatatc agntaaaatt ngggtcataa aataagtata
 660
 tcagntattt tacaaaaatt ataagtnnc accaaatgat agtcccaggn
 720
 gatgggnncag cttnng
 736

<210> 54
 <211> 642
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 54
 ttaactttac acaacacaccc accagagtgt aagctgttcc ataaaaaaatg attgtttcgg
 60
 gctttcggat cacaaggctt gtttagtatt cggttaagaaaa gaaagaaataa ggtgataaat
 120
 aaagtggata gaaacataaa agaaaggaat aaagtaatga aaataaggaa gaagtagaat
 180
 aatggaaata gataagaaat agaatggatt cgatagtata tctagttaa gagaaataag
 240
 aaaaaataag aacaagaaaaaaa atttgcat tttaatttat tatttgcgtt gtatcgatga
 300
 ttggcacgag attataagtt tttttttcg tgtttacgtt gaaggattat atatcataacc
 360
 atttgcgttcaaccaacac ggaactttaa gtctcttgat gttcaaaagc actaaaaact
 420
 aaggaatttt acatcatatt agtcgctgta gactgataca ggattttaag cctatataatc
 480
 tagcattgat cgggtgtcaa tcaatatcac attaatgatc ggttaaaccat tcatataacc
 540

cctttgattg gtcaagaaaat ggctttatga atncccagga ttgagcccag aagacaggtg
600

atactaggtt caattcatgg ttttaggata ggctcgtaaa cc
642

<210> 55

<211> 659

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 55

aaaaggacct aaaagcaaaa agaaaattga gtatccttag gaattaaaaa tattccaata
60

aaaataaaaat aaagatccaa atgatagtgg gataaccgaa gaggaatgtc tttcaaccac
120

tgcctgaccg ccaccactgc caacagccta gtatcaaccg aatccacata taccaacaat
180

cttcagacaa acacttctaa gttggtgctg aagagacaat atctcatggg tagatcaaat
240

taagagtgct accaataaca aaatcggtt catttacta acaaacagtt atgtgcattt
300

gatgttctac catagtagcat tgctttatgt gaaattcttt taattattca atattgacat
360

gntcttatat atatatatat atatatatat atatatatat atatacgagg gattgnatta
420

tctctgaaaa aagattttat cataaaatca taatgatttc tcataatgna tctttacatt
480

ttaaaggtag ataaataaaa ttgatTTAA tnggnagata taattaaaat acataattaa
540

tatgactttt aacccaaattt atatataaac actttaaaaa aagttcatga acgnccgggg
600

ngnattggnt gggncaaaaaa aaaattaata ctatcaacct aattaaaaat tatttatan
659

<210> 56

<211> 805

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 56

ccaatgccag agcttcccta tcgtgggccc cacctatgaa gaatacacccc acgttgaat 60
60
acatgttgtt gtttgtggac gcgcccagcc gagagtgccg gtccacgagt atccccaaacg 120
120
tgcattggcgc atgcgcttga aacctagttat tcattttcct gatggaggca gccacgtgtc 180
180
cgacaagggtc aatgttgccg ttttcgtgaa aagggtatgat aatgaaaggc accatattgt 240
240
cttggccgag gttgaaaatg gcgtcgtgca tgctcttgta aggtgccacg ttgtatgttagg 300
300
gaagaacctt gactggccca cttgagttgt tggagtagtt ttcgaaggct tgcatgtatgt 360
360
ggttgggtgtt gggtaattc acagacaaga attttctgct accgtgtcta tggatgtatgg 420
420
gaaggagaat gggtaactt ttccccacga gctcgataag gtggactgct tagacgcata 480
480
tggggctctc ttgcactggg ttgcactctt ctaataaggc agtgtatgcca cgcacgtttg 540
540
ctttcattat gtacacaaca aaacaatgtg aaaactctct gtttcttggg ggtgtttgg 600
600
atcgttctcn agttccctt cgaataagct ttctgcgtgn tacttcnagg ggcnatgct 660
660
ttgtaccaat atgnntancc caagggngnt tnccattncn ggtctttact accacnacat 720
720
aacaccnat tnnttgaann gnancnacnac caacntctac naaancgtna tcaatnacnt 780
780
tnnatnngat ttgannact ggccn
805

<210> 57
<211> 632
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 57
tttagaattc ataatagtga cacttgatta agttagatta gactttataa aacacgagtt 60
60
tgatTTTTTT ttaataata attaagggttc tagtttatat atattatata gttgatata 120
120

actactttca aaagtctgac taaaaagtct ctttagtata cataataata taacctttta
 180
 attagttaa aaaatttgc cctaaataaa ttaataaaatc caaacttata tacaagttaa
 240
 taggcttaag tctaaaaaaa ataataatata tataatata taaagcatta aaacatttca
 300
 atgaaaaacaa tataataata ataataataa atatattatt gttattaatt catagatttt
 360
 attattacta ttatagaata atttgtgtgt atatatataa atatataagag agagagaggg
 420
 tcattttata tgagtgagaa aatttaaata ttattatgaa ttttcaaaat taaaatcaca
 480
 tgccatatga ttttcttaaa aaattacgta actttttttt ttacaaaagt aatcatatgg
 540
 ttttaaaaac taatttaat aacttatata taactatatc agttaaattt ggtcataaaa
 600
 ataagtatat cagttatTTT aaaaaattat aa
 632

<210> 58
 <211> 437
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 58
 cttttgacac tatngaatac gaattcgaat gtcggagcgt gcagatacga gggtagctt
 60

gtttaggttt gttatcgtga acaagaaacc gtgtggttgt aaaatttattt tgacaagaga
 120
 agagcgtgaa gaggaaagagg aagataccat gttggacgag gggtaattt acgagttcaa
 180
 gagcatgaaa tatggcattt gtaacgtttt ttggtagcgtt attacgggtt acgtgggggt
 240
 ggaggtttt gaagcgttgc atagtttggaa agggaaactat gatcttgcgtt tggtggaaag
 300
 ggcgcacaat gatggatctt tgaatggaaa agaaatgaca actttcatgg agaacgctga
 360
 tgcattggaa atattgtggg atatgtccc ttcccccanc ntgnntggcn tngttccgct
 420

tttttcgnct ntnngcc

437

<210> 59
 <211> 681
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 59
 ggnttctta gggcttcaaa atttgatcct agatcataac tttttcact ggtgacgttc
 60

ctgcttcctt gggtagctta agagagctca atgagattc ccttagtcat aataagttta
 120

gtggagctat accaaatgaa ataggaaccc tttctaggct taagacactt gacatttcta
 180

ataatgcctt gaatgggaac ttgcctgcta ccctctctaa tttatcctca cttacactgc
 240

tgaatgcaga gaacaacctc cttgacaatc aaatccctca aagtttaggt agattgcgta
 300

atctttctgt tctgattttg agtagaaacc aatttagtgg acatattcct tcaagcattg
 360

caaacatssc ctcgcttagg cagcttgatt tgcaactgaat aatttcagtg gagaaattcc
 420

agtctccctt gacagtcaag cgccagctaaa tctcttcaat ggttcctaca atagcctctc
 480

agggtctgcc cccctctgct tggcaagaaa tttaactcaa gtcatttgc gggaaatatt
 540

caactatgtg gggtagcc ttcaacccca tggcttcca agctncatca caagggggca
 600

ttggcccccct cctgagnggc aaacatcacc atcataggaa gctaacccca aagacataat
 660

tctcatagta nccaggaggt n
 681

<210> 60
 <211> 644
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 60

acaacaagca acgaacagct tttaaccta aactaggcta atgccaatat taaaagaagaa
 60
 ataattaaaa ttgttaaggct ggtcgtgtat aaattaaaca aaaggccctc tattcaaacc
 120
 ttcatatatac atacctgttt ttaattaacg cggactactt tttcatataa aaaaaagatc
 180
 attagaggat taatttaaag cgtttttagtt tttaattacc aaagagtata attattatta
 240
 ggcgccttgc cccacaatca atcacctaaa caagaaaaag aaaaagaaaa aaaaagtcaa
 300
 attggactaa tgcaaaaagtg gcacaatctt tgtcttgaac tcttaatta gcaacaaatt
 360
 atactcttgc cacaatca caagaataacc ttacatgaaa agaatggtaa tttgacgggt
 420
 tacattaaat tataatgcagt ttctgcagg taattaattt tcaagaattt aagggtgggt
 480
 ggtaattttc aatagctagc ttgactagca aaggaaagaa taaaggtaaa atgcttcttg
 540
 gtttggcctt ttggattggc atacttttg ctaaacggaa atggttatata gaatggtaaa
 600
 ggagataaaat tggtacatag ctaaaatggc atagncttaa tccn
 644

<210> 61
 <211> 678
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 61
 aaattcattt aacttctcta attttaaat cgatcaaatt tggttttca atctaaaata
 60
 taagaaaacta tattttgtga tgggtttaaa atcgacatta agtgttctta atctaccaca
 120
 aaaagcacat ttccaaaaaaaa ataaatttaat tttaaaaatt ataagatcaa attgaatcaa
 180
 tttaaaaat taaaatatta aattgaaaaa aaaaataaag gatcaaattg aacataaaata
 240
 ataaatttga ggattaaaaa actaattaa ccttaattt tttctcactt atattaatat
 300

taaaaaatta tattgatttt cctaataact ccttatctca attaaaattt ccaaaaatta
 360
 attctagcat cttcaaacac tactcaccat gaaagttcat cacaaccatc tttctttctc
 420
 ttttctctac atcatgtttt cgcttcgcaa actttattgt gttcctagtc ttagacgtct
 480
 gataatcttc cacaagtatt gaactataac acttatttgg a cttgcacccgg taatagctaa
 540
 caccaaatga gacgtgcact tgacttttat atcactaaga aaatttcaac acattgacca
 600
 agattagctc catcttgctt taacacttgg ttgactagtc acttaagtgc aacaaccact
 660
 ttgatatcat tgggtgga
 678

<210> 62
 <211> 571
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 62
 tcttttaaga ccattcgaca ctatagaata cgaattccat aattaacaat aaagtcatct
 60
 tctattatat atttttctt cttaaattac atgatagttat ttcatcatta tttgacaata
 120
 atgatatttt tatctcataa atattatttt gttttaaaaa tattcatagc acacacgagt
 180
 tttttatatc aacaaagagg tatcacttca gttggtaat ttggtaac ttttagacaa
 240
 tgcgtatag ttgaattgaa ttgaaatttg gcagtatata ttttactttt tgccccctta
 300
 ttttcaatca aatttagagta gacgcctcgt attattggca tacatggata ttggatcgcc
 360
 acctgtgttt cagacctgag tcacatctga ctcggatcga ttttatctta catgaaaatt
 420
 ccaaaataat gaaagatatg gcaattggca ccatgttaact ctatggacac caatgcttca
 480
 ccgttagagct ctaaatttcg aggccttcta tatatagttt tgcgtgacta tgtnaaattt
 540

ntcaatatcn tnttaatttt tttgnggcc c
 571

<210> 63
 <211> 856
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 63
 aattagttgt ctgtttatt cattacctt tcaattttt taatcaccat aattaaggcc
 60

tttcgaatcc cttaagtga taaaagaaac gtgcaattat gcgaacaaat aaatttcgt
 120

tatgttacta tttagtcaag gaggaaaaaa aagtgataag ggaagaaaca agggatattt
 180

cctgttataa caaacttaaa atggcgacta ttttgcgac attgcaaata ctcatagtagc
 240

gatataaatt ttgaatttaa tatacatga ataggcatat tcattttcta ccccaaaaaa
 300

gcataactcat ttatgtacat ttaattttct ctccatagag gaattaatgt acaaccatgc
 360

ataaggatg agcgaaaggg acagattatt gcaatccaga agcatccaag gaaagttgga
 420

taaacaaatc aattaatata tataaaaaaa aaacaaaaat gtccttagta gaagattaaa
 480

ggaagagttg gctatatatg gcaaaccctt tctaactggt ttacccttct ctcatcaccc
 540

gcattgcac accaatacgg gaactttcc cattacaaaa ctcattggaa gccaacataat
 600

ccccaaaaat tccactggat ctgcattgtc catgaaattt gacatttctt cttctacaaa
 660

atccccatgc tatgtcggtt tccaccatcc taggtcatag tccttcttca ttccccgaat
 720

cgnntcacac ttgtatgcaa tcttccaccc cagcctcatg ggaaacacccg ntaacactat
 780

cactctaata tcattcttgg cataaactca tctataaacc tctcgncac gggctcttta
 840

aattctcatac ttnttn
 856

<210> 64
 <211> 639
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 64
 tccccttgg gtcccaagta ataggccctc agagccaaaa cattggggtg tctaatttt
 60
 cctagaacac tgacttctga ttcaaattct ctatgacctt tagtgatctt ttccctcaat
 120
 ctctttactg caacttgact tccatcctcc aaaatagcct tataaacagt tccataggtg
 180
 ctctttccca tcatctcagc tggcacac aagagatcat cagctgtaaa agccattgg
 240
 ccatcaaaat ggacttagttt ccctccagcc tccccacctg cttcaacatc accaccagca
 300
 actggaggga ctcccttttc tgcctcata gtggccgctc taccctcggt ggcttggccg
 360
 tcccgccctt agatgttcat ctctttctga tcaggcagaa aagcaggaca caacaaagta
 420
 taatcaggac tacgaggaga actcctgcta ctatgagaat tatgtctttg ggcttagctt
 480
 ctatgatgggt gatggtttga cacttcagga ggtggggcaa tgactccttg tgatggagct
 540
 tggaaagac atggggttga agggctggac ccacatagtt gaatattcc acaaatgagc
 600
 ttgagttaaa attcttggca agcananggg ggacagaan
 639

<210> 65
 <211> 495
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 65
 ttcccaatgc cggagcttcc ctatcggtgg ccccacctat gangaataca ccctcgaatg
 60
 aaatacatgt tgggtgtgtt ggacgcgcggc agccgagagt gcccgtccac tagtatcccc
 120

aacgtgcatg gcgcgc ttgaaacctt gtattcatct tcctgtatggaa ggccggccacgg
180

tgtccgacaa ggtcaatgtt gccgtttcg tgaaaaggga tgataatgaa aggcaccata
240

ttgtcttggg cgaggttcaa aatggcgctg tgcatgtct tgtaagggtgc cacgttgtgc
300

tagggaaagaa ccttgactgg cccacttgag ttgttggagt agttttcgaa ggcttgcatt
360

atgtgggtgg tggggta attcacagac aagaatttc tgcgaccggg tctatgttt
420

atgggaagga gaatgggtgc actttccca cgagctcnat aagggggact gcntanacnc

atatggggct ctctt
125

```
<210> 66
<211> 480
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 66
cnnntcttaga atcgaattct ttggtatcag aacatatcag tcattttaa agaataagaa
60
```

attaaat tag acttaat tt taagagtat g gat taaaat tt gt ggggattata
120

aacataaaata agtaattttt cctatatgag acatttattg aaatcttaag ataagatacgt
180

tacatgcaaa ttaaattgtat gcatgataat agaatttaggt gaatagtccaa atacctgaca
240

cctcttttgtt ccgaagtttt tggggcactt ctgtataacct aaacccacag tgaagaagag
300

gctctggtca atttcagtgg gtacttcaac ttttcttaggg cttctgaagc ttttgctgaa
360

ggaaatgtact gcgtttgtgt ccgttgtaag cagggagtgg aggcattata ggtttgggtt
420

tgttcttac tccttggca cgatggtgag aatgcttatt gtggtgattc ggtgatttgt
480

<210> 67
<211> 669

```

<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 67
atgccccaaa aatttaccta aaagcaaata aaaaagatga gtatttcttt taaattaaaa
60

atattttaat aaaaataaaaa taaagatcca aatgataatg tgataaccga agaggaatgt
120

ctttcaacca ctgcctgacc gccaccactg ccaacagcct agtataacc gaatccacat
180

ataccaacaa tcctcagaca aacacttcta agttggtgct gaagagacaa tatctcatgg
240

gtagatcaaa ttaagagtgc taccaataac aaaatcggga tcatttgact aacaaacagt
300

tatgtgcatt gnatgttcta ccatagtaca ttgctttatg taaaattttt ttaatttttc
360

aatattgaca tgggtcttat atatatatat atatatatat atatatatat atatatacga
420

gggattgtat tatctctgaa aaaagatttt atcataaaat cataatgatt tctcataatg
480

gatctntaca ttttaaagggt agataaataa aattgatttt aaatngggag atataattaa
540

aanacataat taatatgact tttacaataat tgatataaa acactaaaa aaaaagntcca
600

tgacgcacng ggggnattgg tgggacaaaa aaaatttatct atcactaatt aaaantatta
660

taaatatan
669

<210> 68
<211> 486
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 68
tggtgtatat aattaaaaatg agttaatat ttatgtatta atagtataaa atttacata
60

catgatgaat ggtgaaattt tgaattatga ttaataatt atataaaaaa atttacatga
120

```

tgaatgaata acttttttt tctcaattaa aattatgatc ctttgcgt atgtttact
 180
 gtgtcgacct ttttttcgg gggagagggg accagtagga gaagtagtat ttagtaaaag
 240
 aagggagaga gaagttgact ttcctttaa ttagttttaga gaaaattttaga cgagaaggaa
 300
 aaaaaatagg cgaaagtcac ttttcttc tatctctacc aagaatgtt ataaaaaagt
 360
 ggggagcaga attttaaatt tttatttca tatttacct tctccacatt tttgnnttct
 420
 tccattttt tataaaanga tttattttag gcatagncaa ctttcaatt ttttcattt
 480
 ctattc
 486

<210> 69
 <211> 779
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 69
 tatttgtaaa ttgtttttta taattgaaaa gaaaataagg ttaaatttatt ttcataaaaa
 60
 aaatthaatt tggcttata agttatttg aaaatttat taaaataagt tgaaaacaat
 120
 ttataaataaa atcataaaact ataattttat aagtttctt aaataacttac acgtatgcc
 180
 taaaataagt tcagataaga tataaataaa ttccctccaaa cacatctaa atctatattt
 240
 ttttaaaaca aactttcatc gttaaaagga tattataata ataataataa acttcaatca
 300
 ttaacaattha atatatgtgg ataaaaagagc attcaaaatg atatttattt agcacatgac
 360
 aaatcacatt actctcaagc tatttttta aactaataaa aacttacata ttatatgata
 420
 tgatatac tctctctata tttacacttt tttgagataa acaaggataa aaaatgatgt
 480
 aaatatgacc gcatataata ttatttataa tgtacggat gccgttttg acattttata
 540

taatataatct gggggcaatt attttcttaa ccaataatta gcaaattttt atcttgctt
600

ttctccatgg gggctaaatt aaactaaagg gncgtaccca atccagtcac acttttttt
660

aaataatnn tttccntccc acttagnaaa ggagtnttn ggcttaaataatn ggcagnncca
720

ttaaccataa gccttntgg taaggagtct taccaantaa aatgggaaag gccccccccc
779

<210> 70

<211> 677

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 70

ttattggcctt aacttgagtt tcaactcctt ctctggcctt ttaccagcta gcctaactca
60

ctcattttctt ctcacttttc tttctttca aaataacaat ctttctggctt cccttcctaa
120

ctcttgggtt gggaaattcca agaatggcattt ctttaggctt caaaatttga tcctagatca
180

taacttttc actggtgacg ttcctgcttc tttggtagc ttaagagagc tcaatgagat
240

ttcccttagt cataataagt tttagtggagc tataccaaat gaaataggaa ccctttcttag
300

gcttaagaca cttgacattt ctaataatgc cttgaatggg aacttgcttg ctaccctctc
360

taatttatcc tcacttacac tgctgaatgc agagaacaac ctccttgaca atcaaatccc
420

tcaaaagtta ggttagattgc gtaatctttc tggatgttgcattt ttgagtagaa accaatttag
480

tggacatattt ctttcaagca ttgcaaacat ttcctcgctt aggcagcttg atttgcactg
540

aataattca gtggagaaat tccagctcctt ttgcagtcag cgcaagctaaat tctcttcaat
600

ggttcctaca atagcctctc anggtctgtc cccctctgc ttgccaagaa atttactca
660

agctcatgg tggaaat

677

```

<210> 71
<211> 571
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 71
tgggactggc tgtgactgat ctctctggc taatctcttc cagctgctgg agaacttgat
60

gaacttctgg tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt
120

ttagcaactc gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat
180

ttgtccactc ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag
240

acaccccaagg tgatttcctc gttaggagtt ctaacaagat aacaccaaga ctgttagatat
300

cagttttagt gtttgcttgc ttgagcttg agagctcagg tgcccggtat cccaatgctt
360

cagctgttagc tattcacgttg gaattagcag cagttgacat caaccgagaa agacccaaat
420

ctgcaatttt agcatttgna ttctcattaa acaacacaat gntggatgng anggtnccat
480

ggatgaaggt ctctnggna agnaagnaaa acaaaggcacc gggccaaggn ttgggctaat
540

ttcaacccttg gggggcaaac naanaaatgt t
571

<210> 72
<211> 756
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 72
attggcttaa cttagtttc aactccttct ctggccttt accagctagc ctaactcact
60

cattttctct cactttctt tctcttcaaa ataacaatct ttntggctcc cttnctaact
120

gtgggggggg gaatancaag ggnggcttta ggctgcaaaa tttgatccta gatcataact
180

```

ttttcaactgg tgacgttcct gcttcttgg gtagcttaag agagctaat gagattccc
 240

ttagtcataa taagtttagt ggagctatac caaatgaaat aggaaccctt tctaggctta
 300

agacacttga catttctaatt aatgccttga atgggaactt gcctgctacc ctctctaatt
 360

tattcctact tacactgctg aatgcagaga acaacctcct tgacaatcaa atccctcaaa
 420

gtttaggtag attgcgtact ctttcctgtt ccgattttga gtagaaacca atttagtgga
 480

catattcctt caagcatngc nnacattcc tcgcttaggc agcttggattt tcactgaata
 540

atttcaggtg gagaatttnc agtctncttt gacagtcagc gcagtctaaa tcttcttcaa
 600

tggtnctac aataggcctc tcagggctg gccccccctt gnttggccaa ggaaanttaa
 660

cttaagctta tttggggggg aaanattcaa ctatgggggg acncggccct ttaaaccctt
 720

gggntttcc caggttcctt ccaaggngc anttgc
 756

<210> 73
 <211> 557
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 73
 tgtgactgat ctctctggtc taatctcttc cagctgctgg agaacttgat gaacttctgg
 60

tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt ttagcaactc
 120

gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat ttgtccactc
 180

ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag acnccccagg
 240

tgatttcntc gtttaggagtt ntaacaagat aacaccaaga ctgttagatat cagtttttagt
 300

gtttgcttc ttgagcttg agagttaagg gncccgant cccanngntc nagttgnagt
 360

tatancgttg gaatttagcag nagttgcntc aaccgaaaaa gaccaaaatc tgaattttag
 420

catttgtttt tcatcaagca acacattgnt ggatgngagg tcccatgtat gatgttctcc
 480

tggaatgaa ggcaaacaag cccggccaa ggcttggct atttaatcc ttggtgccaa
 540

aacaatgaaa ggttnat
 557

<210> 74
 <211> 673
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 74
 gggactggct gtgactgatc tctctggct aatctttcc agctgctgga gaacttgatg
 60

aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtgtt
 120

tagcaactcg tcgccaactg tggatgcatt tctcatcaag tctgcattcaa aaacctcatt
 180

tgtccactcc tcttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
 240

cacccaggt gatccctcg ttaggagttc taacaagata acaccaagac tgttagatatc
 300

agtttttagtg tttgctttct tgagctttt agaagctcag gtgcccggta tcccaaattgc
 360

ttccagctgt agcttatacac cgttggaaat taagcagcaa gttggacatt caacccggag
 420

aaaaagaccc aaaaatttttcaaaatttttcaagcaatttng gnanttcttn aatcaaggcc
 480

aaccaccaat tggnttggga atggtggaaag ggttccccca atggtaatttgc gaagggtttc
 540

ttccctnggg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaagggt
 600

nttttggggg ctttattttt tncnaatncc ctttggnnngg ggncccaaattt tcnaaaantgg
 660

aaattggntt tnn
 673

```

<210> 75
<211> 602
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 75
aggctagctg gtaaaaggacc agagaaggat ttgaaactca agttaagcca ataaagctta
60

gtggaattag caagactata agggattgct cctgtgagca agttgttgct gaggtcaaga
120

gactgaagca aagggcagaa acctaaagaa agaggtatgg aacctgtaag cctattgttg
180

aataactgaa cccctctaag gttggaaaga agtcccaaag ttgaaggat tgaaccacca
240

atttggttat catgaagact aagcttcctg aggccttgaa gttggccat tttggcggtg
300

attcgacccc tcaaaccctt ccaaggaagc tggatcacaa taacctgtcc ctgagcacac
360

ttgattccaa cccaacctcc ggaacaagct ccatagccac tggcattcca gctcccgcaa
420

gaacccttct ggatcagcca actcttgctt gaaagcttat cacatgtacc tctctacaga
480

taggagggtg cttttccct ttcactggnc tacctttcg ggaataagcc acctaattgag
540

aaagaaagan ctggatagc taactctaca tagnctcaag gcnaagagata attaggaaa
600

ng
602

<210> 76
<211> 748
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 76
attggcttaa cttgagttc aactccttct ctggccttt accagctagc ctaactcact
60

cattttctct cactttctt tctcttcaaa ataacaatct ttctggctcc cttcctaact
120

```

cttggggtgg gaattccaag aatggcttct ttaggcttca aaatttgcac ctagatcata
180

actttttcac tggtgacgtt cctgcttctt tgggttagctt aagagagctc aatgagattt
240

cccttagtca taataagttt aatggagctg taccaaataatga aataggaacc ctttcttaggc
300

ttaagacact tgacatttct aataatgcct tgaatggaa cttgcctgct accctctcta
360

atttatcctc acttacactg ctgaatgcag agaacaacct cttgacaat caaatccctc
420

aaagtttagg tagattgcgt aatcttctg ttctgatttt gggtagaaac caattttagtg
480

gacatattcc ttcaagcatt gcaaacattt cctcgcttag gcagcttgat ttgcactgaa
540

taatttcagt ggagaaattc cagtctcatt tgacagtcaa gcgcagaatctt aatctcttc
600

aatgttcctt acaatagcct ctcanggtct gncccccctc tgcttgccaa gaaatttaac
660

tcaagctcat ttgtggaaa tattcaacta tgtggacag nccttcaacc ccatgtttt
720

ccaagcttca tacaaggagc atggccct
748

<210> 77

<211> 563

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 77

ctggctgtga ctgatctctc tggcttaatc tcttccagct gctggagaac ttgatgaact
60

tctggtcgtg ctgatggaga aggtcaaca cagtgcacaa cgagcttcaa cgtgttttagc
120

aactcgtcgc caactgtgga tgcattcttc atcaagtctg catcaaaaac ctcatttgc
180

cactccttctt tgacaactga ggcaacccac tgaggcaat ctgtccatt catagacacc
240

ccaggtgatt tcctcgtag gagttctaac aagataaacac caagactgta gatatcagtt
300

ttagtgtttg ctttctttag ctttgagagc tcaggtgccc ggtatccaa tgctccagct
 360
 gtagctatca cggttggatt agcagcagtt gacatcaacc cgagaaagac caaaatctgc
 420
 aatttttagca tttgttattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat
 480
 gatgttctcc tggaaatgaa ggcagaacaa gccacggcca agcttggcta tttcatcctt
 540
 gtggccaatc aatgaatggt cat
 563

<210> 78
 <211> 623
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 78
 gattttgcac atctacttga gtaggcttca catgattccg tgtattactt ttatttggt
 60

atatataacca tgtggagttt agtatcactt tttgtcctac aaccacattt tatgagactt
 120

gcattttatg tgacatgaac ataaaaaaaata atgaaaaaga aaatgtcaca tatatatgat
 180

acaatctttt taaaagtcaa tttgaataat ttttcatcag gagaaaaaag aagagagaaaa
 240

atgaattaag tttcttctaa aaattaaaat caacttataa aaagaaaaaaa cttaatgaa
 300

aaaaattcaa aaagaaaaaag aataaaatga tcaatagcct ttaggttaa gcacaagggt
 360

aatccaaata aagacccaa aagatagtac agaacccaaat aatggtaaaa tcttagaaata
 420

tacatgtaaa gactgcattt atagaccatc atgacttagca aatgctaaa ggcacataga
 480

tgaattaatc tatgcaacaa aatctgnccc aagtttttt tangcaagga aaatcatatc
 540

attttattaa ggataactga gaggaccaat ggtgtaatca attgaaatca tgcgaggctt
 600

acatgaaatc tgtcaccaag tac
 623

<210> 79
 <211> 605
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 79
 ctcccgggtc ccaagtaata ggccctcag agccaaaaca ttggggggc taattttcc
 60
 tagaacactg acttctgatt caaattctct atgaccttta gtgatctttt ccctcaatct
 120
 ctttactgca acttgacttc catcctccaa aatagcctta taaacagntc cataggtgct
 180
 ctttcccatg atctcagctg gtgcacacaa gagatcatca gctgtaaaag ccattggtcc
 240
 atcaaaatgg actagttcc ctccagcctc cccacctgct tcaacatcac caccagcaac
 300
 tggagggact ccttttctg cctcatactg gccgctctac cctcggtggc ttggccgntc
 360
 ccggccttag atgntgatct ctttctgatc aggagaaaaa gcaggacaca acaaagnata
 420
 atcaggacta cgaggagaac tcctgctact atgagaatta tgnctttggg gcttagctc
 480
 ctatgatgg gatggttnga cactcanga gggggggcaa tgactccctg gganggagct
 540
 tggaaagac atgggggtga aggnctgnac ccacataggn gaaaaattcc cacaangag
 600
 cnngn
 605
 <210> 80
 <211> 711
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 80
 ttaangncca acgactcaact atagggcgaa ttgggcccga cgtcgcatgc tcccgccgc
 60
 catggccgcg ggattggctt aacttgagtt tcaactcctt ctctggctt ttaccagcta
 120

gcctaactca ctcattttct ctcacttttc tttctcttcn taaaataaca atctttctgg
180

ctcccttcct aactcttggg gtgggaattc caagaatggc ttcttttaggc ttcaaaaattt
240

gatcctagat cataactttt tcactggtga cgttcctgct tctttggta gcttaagaga
300

gctcaatgag atttccctta gtcataataa gtttagtgga gctataacaa atgaaatagg
360

aaccctttct aggcttaaga cacttgacat ttctataataat gccttgaatg ggaacttgcc
420

tgctaccctc tctaatttat cctcacttac actgctgaat gcagagaaca acctccttga
480

caatcaaatc cctcaaagtt taggttagatt gcgtaatctt tctgttctga ttttgagtag
540

aaaccaattt agtggacata ttccttcaag cattgcaaac atttcctcgc ttaggcagct
600

tgatttgcata ctgaaataatt tcagtggaga aattccagtc tccttgaca gtcagcgcag
660

tctaaatctc ttcaatgttt cctacaatag cctctcaggg tctgtcccc n
711

<210> 81

<211> 716

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 81

ttnntgaaaa cccttgcta ttttaggtgac actatagaat actcaagcta tgcataccac
60

gcgttggag ctctccata tggtcgaccc gcaggcgcc gcactagtga ttaatacgac
120

tcactataagg gctcgagcgg ccggccggc aggtggact ggctgtgact gatctctctg
180

gtctaatctc ttccagctgc tggagaactt gatgaacttc tggtcgtgct gatggagaag
240

gatcaacaca gtgcaaagcg agcttcaacg tggtagcaa ctcgtcgcca actgtggatg
300

catctctcat caagtctgca tcaaaaacctt catttgcctt ctcctcttgc acaactgagg
360

caacccactg aggcaaatct agtccattca tagacacccc aggtgatttc ctcgttagga
420

gttctaaca gataaacacca agactgtaga tatcagttt agtgttgct ttcttgagct
480

ttgagagctc aggtgcccgg tatcccaatg ctccagctgt agctatcacg ttgaaattag
540

cagcagttga catcaaccga gaaagaccaa aatctgcaat tttagcattt gtattctcat
600

caagcaacac attgctggat gtgaggttcc catgtatgat gttctcctgg gaatgaaggc
660

agaacaagcc acgggccaag tcttgggcta ttttcattcct tggtgggcca atcaan
716

<210> 82

<211> 713

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 82

tccctaangc ctacgactcc tatagggcga attgggcccgg acgtcgcatg ctccggccg
60

ccatggccgc gggattatac gactcaactat agggctcgag cggccactat gaggacagaa
120

aaaggagtcc ctccagttgc tggtggtgat gttgaagcag gtggggagggc tggagggaaa
180

ctagtccatt ttgatggacc aatggctttt acagctgatg atctcttgc tgcaacagct
240

gagatcatgg gaaagagcac ctatggaact gtttataagg ctatggaa ggatggaaagt
300

caagttgcag taaagagatt gagggaaaag atcactaaag gtcataagaga atttgaatca
360

gaagtcagtg ttcttaggaaa aatttagacac cccaaatgttt tggctctgag ggcctattac
420

ttgggaccca aaggggaaaa gcttctgggtt tttgattaca tgtctaaagg aagtcttgct
480

tctttcctac atggtaagtt tcgtgtgctg ttcttcatt aagtgttgc tggctgttc
540

tttaattata atttggagtt ttaccttagt aatctgtata attctaattcg gagaacagta
600

caaacaaaaa cacctaagga acaacacctt anctttaata taccatatca ataagtgaat
660

tatTTTCTTA ttcatcttga tgcaggtgg ggaactgaaa catttatttgc atn
713

<210> 83

<211> 712

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 83

nnnctaaggc ccnttactca ctatngggcg aattgggccc gacgtcgcac gctccggcc
60

gccccatggccc gcgggattgg cttaacttga gtttcaactc cttctctgg gctttaccag
120

ctagcctaac tcactcattt tctctcactt ttctttctct ttaaaaataac aatctttctg
180

gctcccttcc taactcttgg ggtgggaatt ccaagaatgg cttctttagg cttcaaaatt
240

tgatcctaga tcataacttt ttcactggtg acgttcctgc ttctttgggt agcttaagag
300

agctcaatga gatttccctt agtcataata agtttagtgg agctataccca aatgaaatag
360

gaacccttcc taggcttaag acacttgaca tttctaataa tgccttgaat gggacttgc
420

ctgctaccct ctctaatttta tcctcactta cactgctgaa tgcagagaac aaccccttgc
480

acaatcaaat ccctcaaagt ttaggttagat tgcgtaatct ttctgttctg atttttagata
540

gaaaccaatt tagtggacat attccttcaa gcattgcaaa catttcctcg cttaggcagc
600

ttgatttgca ctgaataatt tcagtggaga aattccagtc tcctttgcag tcagcgcagt
660

ctaaatctct tcaatggttt ctacaatagn ctctcagggt ctgnccccc tn
712

<210> 84

<211> 681

<212> DNA

<213> soybean

<220>

```

<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 84
ggnttcttta gggcttcaaa atttgatcct agatcataac tttttcaact ggtgacgttc
60

ctgcttcttt gggtagctta agagagctca atgagatttc ccttagtcat aataagttta
120

gtggagctat accaaatgaa ataggaacccc tttctaggct taagacactt gacatttcta
180

ataatgcctt gaatgggaac ttgcctgcta ccctctctaa tttatcctca cttacactgc
240

tgaatgcaga gaacaacctc cttgacaatc aaatccctca aagtttaggt agattgcgta
300

atctttctgt tctgattttg agtagaaacc aatttagtgg acatattcct tcaaggcattg
360

caaacatttc ctgcgtttagg cagcttgatt tgcactgaat aatttcagtg gagaattcc
420

agtctccctt gacagtcaag cgtagctaaa tctcttcaat ggttccatac atagcctctc
480

agggtctgcc cccctctgct tggcaagaaa tttaactcaa gtcatttgc gggaaatatt
540

caactatgtg gggtagcc ttcaacccca tggcttccca agctncatca caagggggca
600

ttggccccct cctgagnggc aaacatcacc atcataggaa gctaacccca aagacataat
660

tctcatagta nccaggaggt n
681

<210> 85
<211> 639
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 85
tccccttgg gtcccaagta ataggccctc agagccaaaa cattgggtg tctaattttt
60

cctagaacac tgacttctga ttcaaattct ctatgacctt tagtgatctt ttccctcaat
120

ctctttactg caacttgact tccatcctcc aaaatagcct tataaacagt tccataggtg
180

```

ctctttccca tcatctcagc tttgcacac aagagatcat cagctgtaaa agccattgg
240

ccatcaaaat ggactagttt ccctccagcc tccccacctg cttcaacatc accaccagca
300

actggaggga ctcccttttc tgtcctcata gtggccgctc taccctcggt ggcttggccg
360

tcccggcctt agatgttgat ctcttctga tcaggcagaa aagcaggaca caacaaagta
420

taatcaggac tacgaggaga actcctgcta ctatgagaat tatgtcttg ggcttagctt
480

ctatgatggc gatggtttga cacttcagga ggtggggcaa tgactccttg tgatggagct
540

tggaaagac atggggttga agggctggac ccacatagtt gaatatttcc acaaattgagc
600

ttgagttaaa attcttggca agcananggg ggacagaan
639

<210> 86

<211> 661

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 86

gaaggatggc tattttgaag agaaagaaaa gtgagagaaaa atgagtgagt taggcttagt
60

ggtaaaggac cagagaagga gttgaaactc aagtttagcc aataaagctt agtggattt
120

gcaagactat aagggattgc tcctgtgagc aagttgttgc tgaggtcaag agactgaagc
180

aaaggccaga aacctaaaga aagaggatag gaacctgtaa gcctattgtt gaataactga
240

accctctaa ggttggaaag aagtccaaa gttgaaggaa ttgaaccacc aatttggta
300

tcatgaagac taagcttctg aggcctgaa gttggccat tttgtcggtt attcgacc
360

tcaaaccctt ccaaggaagc tggatcacaa taacctgtcc ctgagcacac ttgattccaa
420

cccacctccg gaacaagctc catagccact gtcattccag cttccgcaag aacccttctg
480

gatcagccaa ctcttgcttg aaaagcttat cacatgtacc ttttacagat aggaggntgc
540

ttcttcctt cactggtcta cctcttcgga ataagccaac ctaatgagaa agaaagatct
600

gngatagctn acttacatac tnagnagag ataattantg naagcnnaag taaaacntnt
660

t
661

<210> 87

<211> 626

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 87

aattcgtggg ctacaaaagga tgaacgtaaa ctatatgcac ctccagctgg ttcaggcttc
60

atatctggct ttacttctat ctcacgcaga tcttctgttg atagtactca aaatctgtct
120

atcccttttg gtccaaagctc atacctttct gcacaggctc gagtagttga tgagtattct
180

atgtcccaaga ttatcttaca aaatgtgctt gatggagggg tcactggat gttaatagtt
240

gtcactggtg caagccatgt tacatatgga tctagaggaa ctggagtgcc agcaagaatt
300

tcaggaaaaa tacaaaagaa aaaccatgca gttatattac ttgaccctga aagacaattc
360

attcgcagag aaggagaagt tcctgttgct gatTTTTGT ggtattctgc tgcgagaccc
420

tgttagtagaa attgctttga ccgtgctgag attgctcggtt ttatgaatgc tgctggcg
480

aggcgagatg ccctcccaca ggtaaaccaa caattacagt tactaatttgc tttgactgtt
540

aatcttcttg ccccatagac cctncttcca attttagcc ctatgtcc ttcattcc
600

agngggataa gggtttgggg gnggtg
626

<210> 88

<211> 627

```

<212>  DNA
<213>  soybean
<220>
<221>  misc_feature
<223>  n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400>  88
tgaaaaactg aaggaccaa tttaaatctaa aaaataaata aattaaaaga ctaaaaaata
60

aatctatcca aaattaaaag gtttattctt ggaagtaatg aaatgtattt tgactcttg
120

aagaatgcat tactataatg aaagagtagg tggagagagg ggataataaa atcccactaa
180

ataacatcca tgactatcac tataaaaaaa aatattatta ttaagataag aagaattatc
240

taacttgaat aagagactac taccaaagtg agaaaaaggt cttataacat agagttttc
300

aagtttacct ataaaacttg taataagatt tgtttccaa ccatctaatt ttttatttagt
360

gtggactgca taaaaaaaaat atagtaacaa gaaactacta aattagactt tttgaactat
420

tcattgtatg gctgccatga aacacctac tg cctggagggg tgggtccac gtaagactgt
480

aagagggagg aggaaagcac tagtcacaca ccggcgcacg ttagcgaggc aatgttccta
540

gattgaaacg gagaaggta ttagagggc gaaaaatctca aagcagacac aggcaactaa
600

tttatcgctt ctttcctcat tcgctta
627

<210>  89
<211>  782
<212>  DNA
<213>  soybean
<220>
<221>  misc_feature
<223>  n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400>  89
cacataatta acaataaagt catcttctat tatatatttt ttcttcttaa attacatgat
60

agtatttcat cattatttga caataatgat attttatct cataaatatt attttgggg
120

aaaaatattc atagcacaca cgagttttt atatcaacaa agaggtatca cttcagttgg
180

```

tcaatttggt ctaacttta gacaatgtcg tatagttgaa ttgaattgga atttggcagt
 240

atataatttta ctttttgcgc ccttattttc aatcaaatttta gagtagacgc ctcgtattat
 300

tggcatacat ggatatttggc tcggcacctg tgtttcagac ctgagtcaca tctgactcgg
 360

atcgatttta tcttacatga aaattccaaa ataatgaaag atatggtaat tggcaccatg
 420

taactctatg gacaccaatg ctacgttag agctctaaat ttgaggcctt ctatatacg
 480

tttgcgtgac tatgtaaattt atcaatatca tttaattttt ttgcgaccac gaaatatacg
 540

aatttattat tgaacacaaa aagtagagtg tatattttaa gtctaggatt ttatgagagg
 600

caaaaataag aataacctct tgatatattt tcttggatac actttcttta ttatataattt
 660

tttaataatg gattataattt tattggaaac aatcaaatttta tangggaaaa ttcattggaa
 720

taaaagaang aaatttaaaa aaaaatataa ttttaataa atttaagtaa taaaatcct
 780

tt
 782

<210> 90
 <211> 160
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 90
 tggttgagat gtgtataaga gacagttgcc ccacccctg aagtgtcaaa acatcaccat
 60

cataggaagc taagcaccaa agacataatt ctcatagtag caggagttct cctcgtagc
 120

ctgattatac tttgttgtgt cctgctttc tgcctgatca
 160

<210> 91
 <211> 779
 <212> DNA
 <213> soybean
 <220>

```
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 91
tgctcccgcc gcatggccgn gggattggct taacttgagt ttcaactcct tctctggtcc
60

tttaccagct agcctaactc actcatttc tctcactttt ctttctcttc aaaataacaa
120

tcttntggc tcccttncta actgtggggg gggaaatanc aagggnngct ttaggctgca
180

aaatttgatc ctagatcata acttttcac tggtgacggt cctgcttctt tgggttagctt
240

aagagagctc aatgagatTT cccttagtca taataagttt agtgagacta taccaaATGA
300

aataggaacc ctttcttaggc ttaagacact tgacatttct aataatgcct tgaatggaa
360

cttgcctgct accctctcta atttacccctc acttacactg ctgaatgcag agaacaaccc
420

ccttgacaat caaatccctc aaagtttagg tagattgcgt actcttctt gttccgattt
480

ttagtagaaa ccaatttagt ggacatattc cttcaagcat ngcnnacatt tcctcgctt
540

ggcagcttga ttgtcaactga ataatttcag gtggagaaat tncagtcnc tttgacagtc
600

agcgcagtct aaatcttctt caatggttnc tacaataggc ctctcagggt ctggccccc
660

tttgnntggc caagggaaant taacttaagc ttatTTggng gggaaanatt caactatggg
720

gggacncggc ctttaaacc ccagggnttt tcccagggttc cttccaaggng ngcancgtt
779

<210> 92
<211> 743
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 92
ttggcttaac ttgagttca actccttctc tggccttta ccagctagcc taactcaactc
60

attttctctc acttttcttt ctcttcaaaa taacaatctt tctggctccc ttccacta
120
```

ttggggtggg aattccaaga atggcttctt taggcttcaa aatttgcattcc tagatcataa
 180

cttttcact ggtgacgttc ctgcttctt ggtagctta agagagctca atgagatttc
 240

ccttagtcat aataagtttta gtggagctat accaaatgaa ataggaaccc tttcttaggt
 300

taagacactt gacatttcta ataatgcctt gaatggaaac ttgcctgcta ccctctctaa
 360

tttatcctca cttacactgc tgaatgcaga gaacaacctc cttgacaatc aaatccctca
 420

aagtttaggt agattgcgtt atctttctgt tctgattttg agtagaaacc aatttagtgg
 480

acatattcct tcaaggcattt gaaacatttc ctcgctttagg cagcttgatt tgcactgaa
 540

taatttcagt ggagaaattt cagtcttctt tgacagtcag cgcagtctaa atctcttcaa
 600

tgtttcctac aatagcctct cangttctgn ccccccctctg cttgccaaga aattaactca
 660

agctcatttgg tggaaatat tcaactatgt gggacaggcc ttcaacccca ngcttncca
 720

agcttcataca caaggggcat tgg
 743

<210> 93
 <211> 742
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 93
 ttaacttgag tttcaactcc ttctctggc ctttaccaggc tagcctaact cactcatttt
 60

ctctcacttt tctttcttcaaataaca atctttctgg ctcccttcct aactcttggg
 120

gtggaaatttcaagaatggc ttcttttaggc ttcaaaattt gatccttagat cataactttt
 180

tcactggta cgttcctgct tctttggta gcttaagaga gctcaatgag atttccctta
 240

gtcataataa gtttaatgga gctgtaccaa atgaaatagg aaccctttctt aggccttaaga
 300

cacttgacat ttcttaataat gccttgaatg ggaacttgcc tgctaccctc tctaatttat
 360
 cctcacttac actgctgaat gcagagaaca acctccttga caatcaaatac cctcaaagtt
 420
 taggttagatt gcgtaatctt tctgttctga ttttggtag aaaccaattt agtggacata
 480
 ttccttcaag cattgcaaac atttcctcgc ttaggcagct tgatttgcac tgaataattt
 540
 cagtggagaa attccagtct ccttgacag tcaagcgcaa gtctaaatct cttcaatgtt
 600
 tcctacaata gcctctcang gtctgncccc cctctgcttg ccaagaaatt taactcaagc
 660
 tcatttgtgg gaaatattca actatgtggg acagncccttc aacccatgt ttnccaagc
 720
 ttcataacaag gagcatggcc ct
 742

<210> 94
 <211> 741
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 94
 cttaacttga gtttcaactc cttctctggt cccttaccag ctggctaac tcactcattt
 60
 tctctcaactt ttctttctct tcaaaataac aatcttctg gtccttcc taactcttgg
 120
 ggtggaaatt ccaagaatgg cttctttagg cttaaaaatt tgatcctaga tcataacttt
 180
 ttcactggtg acgttcctgc ttctttgggt agcttaagag agctcaatga gattccctt
 240
 agtcataata agtttagtgg agctataacca aatgaaatag gaacccttgc taggcttaag
 300
 acacttgaca tttcttaataa tgccttgaat gggacttgc ctgctaccct ctctaaattt
 360
 tcctcaactt aactgctgaa tgcagagaac aacctccttgc acaatcaaattt ccctcaaagtt
 420
 ttaggttagat tgcgtaatct ttctgttctg atttttagtta gaaaccaatt tagtggacat
 480

attccttcaa gcattgcaaa catttcctcg cttaggcagc ttgatttgc ctgaaaatt
 540
 tcagtggaga aattccagtc tccttgaca gtcaagcgca gtctaaatct cttcaatgtt
 600
 tcctacaata gcctctcang ttctgccccct ctctgcttgc caagaaattt aactcaagct
 660
 catttgtggg aaatattcaa ctatgtggga caggcattca accccatgtt tttccaagct
 720
 ccatcacaag gggcattgcc t
 741

<210> 95
 <211> 743
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 95
 cttaacttga gtttcaactc cttctctggt cctttaccag ctggcctaac tcactcatt
 60
 tctctcaactt ttctttctct tcaaaaataac aatctttctg gctcccttcc taactcttgg
 120
 ggtggaaatt ccaagaatgg cttctttagg cttcaaaatt tgatcctaga tcataacttt
 180
 ttcactggtg acgttcctgc ttctttgggt agcttaagag agctcaatga gatttccctt
 240
 agtcataata agttagtgg agctatacca aatgaaatag gaacccttcc taggcttaag
 300
 acacttgaca tttctaataa tgccttgaat gggacttgc ctgctaccct ctctaattt
 360
 tcctcaactt cactgctgaa tgcagagaac aaccccttgc acaatcaaatt ccctcaaagt
 420
 ttaggttagat tgcgtaatct ttctgttctg atttttagta gaaaccaatt tagtggacat
 480
 attccttcaa gcattgcaaa catttcctcg cttaggcagc ttgatttgc ctgaaaatt
 540
 tcaaggggag aaatncagt ctcccttgac agtcaagcgca aagtctaaat ctcttcaatg
 600
 gttcctacaa taagcctctc anggtctgnc cccctctgc ttgncaagaa aattaactca
 660

agctcatttg gggaaatat tcaactatgn gggacagncc ttcaacccat gtttccaag

720

ctccatacan gagcatggcc cnt

743

<210> 96

<211> 742

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 96

cttaacttga gtttcaactc cttctctggt cctttaccag ctggcttaac tcactcattt
60

tctctcaactt ttctttctct tcaaaataac aatctttctg gctcccttcc taactcttgg
120

ggtggaatt ccaagaatgg cttctttagg ctcaaaatt tgatcctaga tcataacttt
180

ttcactggtg acgttcctgc ttcttgggt agcttaagag agctcaatga gattccctt
240

agtcataata agtttagtgg agctatacca aatgaaatag gaacccttcc taggcttaag
300

acacttgaca ttcttaataa tgccttgaat gggacttgc ctgctaccct ctctaattt
360

tcctcaactt cactgctgaa tgcagagaac aaccccttgc acaatcaaatt ccctcaaagt
420

ttaggttagat tgcgtaatct ttctgttctg attttagtta gaaaccaatt tagtggacat
480

attccttcaa gcattgcaaa catttcctcg cttaggcagc ttgatttgc actgaataat
540

ttcaggggga gaaattccag ttcctttga cagtcagcgc aagtctaaat ctctcaatg
600

gttcctacaa tagcctctca ngtctgncc cccctctgct tgncaagaaa ttaactcaag
660

ctcatttgc gaaaaatttc aactatgngg gacaggcctt caaccatgt tttccaagc
720

ttcataacaag gagtaatggc ct

742

<210> 97

<211> 716

```

<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 97
ggacagaaaa aggagtcctt ccagttgctg gtggatgt tgaagcaggt ggggaggctg
60

gagggaaact agtccatTTT gatggaccaa tggCTTTac agctgatgt ctcttgtgtg
120

caacagctga gatcatggga aagagcacct atggaactgt ttataaggct atttggagg
180

atggaagtca agttgcagta aagagattga gggaaaagat cactaaaggt catagagaat
240

ttgaatcaga agtcagtgtt ctagggaaaa tttagacaccc caatgtttg gctctgagg
300

cctattactt gggacccaaa gggaaaagc ttctggTTT tgattacatg tctaaaggaa
360

gtcttgcttc ttccatTTT ggtttttc gtgtgctgnt ctTTTcattaa agtgnTgggn
420

gggctggtct ttaattataa tttggagttt tacTTTtataa atctgtataa ttctaatcgg
480

agacaagtca aacaaaaacc ctaaggaaca acnccttanc tttaatatnc catatcaata
540

angngaaatta tttttttgggt tcatttggatg cnngggggng gnacntnaaa ctttttttg
600

ntggggccacn anggnnnnaa aannncacaa anantggnc cngngnttn gnnntgcctt
660

tantnccang anaaacatna tacanggnan ctnncntcnn naangtnntn gttngn
716

<210> 98
<211> 616
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 98
ggacagaaaa aggagtcctt ccagttgctg gtggatgt tgaagcaggt ggggaggctg
60

gagggaaact agtccatTTT gatggaccaa tggCTTTac agctgatgt ctcttgtgtg
120

```

caacagctga gatcatggga aagagcacct atggaactgt ttataaggct attttggagg
180

atggaagtca agttgcagta aagagattga gggaaaagat cactaaaggt catagagaat
240

ttgaatcaga agtcagtgtt ctagaaaaaa tttagacaccc caatgtttt gctctgaggg
300

cctattactt gggacccaaa gggaaaagc ttctggttt tgattacatg tctaaaggaa
360

gtcttgcttc tttcctacat ggtaagttc gtgtgctgtt ctttcattaa gtgttgtgtg
420

tgctgttctt taattataat ttggagnttt accttagtaa tctgtataat tctaattcgaa
480

gaacagtcaa acaaaacacc taaggaacaa caccttagct ttaatatacca tatcaataag
540

tgaatatttt ctgggtcatc ttgatgcagg ngngngaaact tgaacaatca ttgattggnc
600

caccanggat gaaaat
616

<210> 99
<211> 532
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 99
actggctgtg actgatctct ctggtctaatt ctcttccagc tgctggagaa cttgatgaac
60

ttctggtcgt gctgatggag aaggatcaac acagtgcacaa gcgagcttca acgtgtttag
120

caactcgctcg ccaactgtgg atgcatctct catcaagtct gcatcaaaaaa cctcattttgt
180

ccactcctct ttgacaactg aggcaacccca ctgaggcaaa tctagtcacat tcataagacac
240

cccaggtgat ttccctcgta ggagttctaa caagataaca ccaagactgt agatatcagt
300

tttagtgttt gctttcttga gctttgagag ctcaggtgcc cggtatccca atgctccagc
360

tgttagctatc acgttggaat tagcagcagt tgacatcaac cgagaaagac caaaatctgc
420

aatttttagca tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat
480

gatgttctcc tggaaatgaa ggcggaacaa gccacgggcc aagtcttgtg ct
532

<210> 100
<211> 568
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 100
tatgaggaca gaaanttnag tccctccagt tgctggtggt gatgttgaag caggtgggaa
60

ggctggaggg aaactagtcc attttcatgg accaatggct tttacagctg atgatcttt
120

gtgtgcaaca gctgagatca tggaaagag cacctatgg aactgtttata aggctattt
180

ggaggatgga agtcaagttg cagtaaagag attgagggaa aagatcacta aaggtcatag
240

agaatttcaa tcagaagtca gtgttctagg aaaaatttgg caccggatg tttggctct
300

gagggcctat tactgggac ccaaaggggaa aaagcttctg gttttgatt acatgtctaa
360

aggaagtctt gtttcttcc tacatggtaa gtttcgtgtg ctgttcttc attaagtgtt
420

gtgtgtgctg ttcttaatt ataatttggaa gttttacctt agtaatctgt ataattctaa
480

tcggagaaca gtcaaacaaa aaccctaagg aacacacctt actttaatat accatatcaa
540

taagngaaatn atttcttggt catcttga
568

<210> 101
<211> 678
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 101
ggtgggactg gctgtgactg atctctctgg tctaattctct tccagctgct ggagaacttg
60

atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gttcaacgt
120

gttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
180

atgtccac tcctcttga caactgaggc aacccactga ggcaaatactgatccattcat
240

agacacccca ggtgatttcc tcgttaggag ttctaaacaag ataacaccaa gactgttagat
300

atcagttta gtgttgctt tctttagctt tgagagctca ggtgcccggatccaaatgc
360

tccagctgta gctatcacgt tgaaattagc agcagttgac atcaaccgag aaagacccaa
420

atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgaggttccc
480

atgtatgatg ttctcctggg aatgaaggca gaacaaggcca cgggccaagt cttgngctat
540

tttcatcctt ggtggccaaat caatgaatgg ttcagtttca ccacctgcat caagatgaac
600

aagaaaataa ttcaatttatt gatatggnat attaaaagct aagggtggatccctagggg
660

tttggtttggc ccggncnn
678

<210> 102

<211> 673

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 102

ggtgggactg gctgtgactg atctctctgg tctaattctct tccagctgct ggagaacttg
60

atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gttcaacgt
120

gttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
180

atgtccac tcctcttga caactgaggc aacccactga ggcaaatactgatccattcat
240

agacacccca ggtgatttcc tcgttaggag ttctaaacaag ataacaccaa gactgttagat
300

atcagttta gtgttgctt tcttgagctt tgagagctca ggtgcccggt atcccaatgc
 360
 tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagaccaaa
 420
 atctgcaatt ttagcatttgc tattctcatc aagcaacaca ttgctggatg tgagggtccc
 480
 atgtatgatg ttctcctggg aatgaaggca gaacaagcca cggccaagtc ttgngctatt
 540
 ttcatccttg ttggccaatc aatgaatggc tcaagttccc cacctgcac aagatgaaca
 600
 agaaaataat tcacttaatg gatatggnat attaaagcta aggggtggtc cntaggggtt
 660
 ttgggttgnc cng
 673

<210> 103
 <211> 665
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 103
 ggtgggactg gctgtgactg atctctctgg tctaattctct tccagctgct ggagaacttg
 60
 atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt
 120
 gtttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
 180
 atttgcac tcctctttga caactgaggc aacccactga ggcaaattcta gtccattcat
 240
 agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgttagat
 300
 atcagttta gtgttgctt tcttgagctt tgagagctca ggtgcccggt atcccaatgc
 360
 tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagaccaaa
 420
 atctgcaatt ttagcatttgc tattctcatc aagcaacaca ttgctggatg tgagggtccc
 480
 atgtatgatg tctnctggga atgaaggcan aacaagccac ggccaagtct tggctattt
 540

tcatccttgt ggncaatcaa tgaatggta anttcccccc ctgctcaag atgaacaaga
600

aaataattca cttattggtt gggntatnaa actaagggggn gnccctaggg gntngntgn
660

ccnct
665

<210> 104

<211> 671

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 104

ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg
60

atgaacttct ggtcggtctg atggagaagg atcaacacag tgcaaagcga gttcaacgt
120

gtttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
180

atttgtccac tcctctttga caactgaggc aacccactga ggcaaattctt gtccattcat
240

agacacccca ggtgattcc tcgttaggag ttctaaacaag ataacaccaa gactgttagat
300

atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggatccatgc
360

tccagctgta gctatcacgt tgaaatttgc agcagttgac atcaaccgag aaagacccaa
420

atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgaggttccc
480

atgtatgatg ttctcctggg aatgaaggca gaacaagcca cggccaagtc ttngctatt
540

ttcatccttg gtggccatc aatgaatgtt tcagttccac cacctgcattc aagatgaaca
600

agaaaataat tcacttattt atatggata ttaaagctaa ggggtggtcc nttagggggtt
660

tngntgggncc c
671

<210> 105

<211> 670

```

<212>  DNA
<213>  soybean
<220>
<221>  misc_feature
<223>  n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400>  105
ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg
60

atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt
120

gtttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
180

atttgtccac tcctcttga caactgaggc aacccactga ggcaaattcta gtccattcat
240

agacacccca ggtgatttcc tcgttaggag ttctaaacaag ataacaccaa gactgttagat
300

atcagttta gtgttgctt tcttgagctt tgagagctca ggtgcccggt atcccaatgc
360

tccagctgta gctatcacgt tggaatttagc agcagttgac atcaaccgag aaagacccaa
420

atctgcaatt ttagcatttg tantctcatc aagcaacaca ttgctggatg tgagggtccc
480

atgtatgatg tcctcctggg aatgaaggca gaacaaggca cgggccaagt cttggctat
540

tttcatcctt ggtggccaa tcaatgaatg gttcaanttc ancacctgcn tcaagangaa
600

caagaaaata attncntatg gnnnggatat naaactaagg ggnggnccta ggggtntnngn
660

nngnccggcn
670

<210>  106
<211>  662
<212>  DNA
<213>  soybean
<220>
<221>  misc_feature
<223>  n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400>  106
ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg
60

atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt
120

```

gtttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
 180
 atttgtccac tcctcttga caactgaggc aacccactga ggcaaatcta gtccattcat
 240
 agacacccca ggtgatttcc tcgttaggag ttctacaag ataacaccaa gactgttagat
 300
 atcagttta gtgttgctt tcttgagctt tgagagctca ggtgcccgtt atcccaatgc
 360
 tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagaccaa
 420
 atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgaggttcca
 480
 tgtatgatgt tctnctggga atgaaggcag aacaagccac gggccaagtc ttngctatt
 540
 tcatccttgt gggcaatcaa tgaatgtta anttccncac ctgcttnaga ggaccaagaa
 600
 aanattactt attggntggg tattaaagct aagggggggc cctaaggggn tttggnnngc
 660
 cc
 662

<210> 107
 <211> 792
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 107
 tatttacaac tagtgttatac ggagaatgaa aaattgaaga ataataagtt cagctataat
 60
 aaactcgagg gaggaaaaac aaagaaattc atgataaata gatataactt attaaattta
 120
 aggggtgtat ttgcacaccc tgaattatag agattcttat atcttgaga aaataattaa
 180
 attggaaaaa aagagataat gactgattga gattgcctc agaattgttc gtttaataat
 240
 tggtaacaaat ctaatggntt tattctgaaa gatgctcaca agtattgagg gactaataaa
 300
 ttgnntataa actactacta aatgagatga gactttaagg ngtactgaag caatatcatt
 360

taaaaaaatga ctactcgcat ttgngtttag aaaaatttatt ttcatgaaag naaattttnt
 420
 ccnntttang ataaagccat ttnncttaac cnangggga nataaaatgg cccccnttca
 480
 taaaaaaacct accanctata taaatggatn tataccaacc ttcctangca ccatgccatt
 540
 gggatnggng gaattaaatt naaaangntt gcnttggaaat gggtaaaaaaa ttccaaaact
 600
 tnaaccccn ccacaatttt agtggccacn gnaatattnn ttanccngt gnctttttc
 660
 cagaaaaacg acccgtaacc aaanggggnn aaaaggaaaa gggagatgga ttgcntgnng
 720
 gtntgaggct catccnatt cccaaacatg ttnggnccc aaaaccgaag tncccctgga
 780
 ccatggatgn cn
 792

<210> 108
 <211> 573
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 108
 gggactggct gtgactgatc tctctggtct aatctttcc agctgctgga gaacttgatc
 60
 aacttctggt cgtgctgatc gagaaggatc aacacagtgc aaagcgagct tcaacgtgtt
 120
 tagcaactcg tcgccaactg tggatgcatt tctcatcaag tctgcattcaa aaacctcatt
 180
 tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatcttagtc cattcataga
 240
 caccccaggt gatttcctcg ttaggaggatc taacaagata acaccaagac tgttagatatc
 300
 .
 agtttagtg tttgcttct tgagcttga gagctcagggt gcccggatc caatgctcca
 360
 gctgttagcta tcacgatggaa attagcagca gttgacatca acccgagaaaa gaccaaaatt
 420
 gcaatttagc anttgnattc ttatnaacaa cacaatggtt ggatgngang gtnccaagga
 480

ttgangttt ctgggaatga aaggganaaa caagccccgg gccaaagntt ggggttattt
540

tnaancctgg ngggncaaann aaangaaagg ttn
573

<210> 109
<211> 673
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 109

gggactggct gtgactgatc tctctggct aatctttcc agctgctgga gaacttgatg
60

aacttctggc cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtgtt
120

tagcaactcg tcgccaactg tggatgcattc tctcatcaag tctgcattcaa aaacctcatt
180

tgtccactcc tcttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
240

caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgttagatatc
300

agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggta tcccaaatgc
360

ttccagctgt agcttattcac cggtggaaat taaggcagcaa gttggacatt caacccggag
420

naaaaagaccc aaaaattttg caaattttta agcaatttng gnanttcttn aatcaaggcc
480

aaccaccaat tggnttggga atgggtggaaag ggtttccccca atggtaatttgaagggtttc
540

ttccctnggg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaagggt
600

nttttggggg ctttattttt tncnaatncc ctttgggnngg ggncccaaatt tcnaaantgg
660

aaattggntt tnn
673

<210> 110
<211> 564
<212> DNA
<213> soybean
<220>

```

<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 110
actggctgtg actgatctct ctggtcta at ctcttccagc tgctggagaa cttgatgaac
60

ttctggtcgt gctgatggag aaggatcaac acagtgc aaaa gcgagcttca acgtgtttag
120

caactcgctcg ccaactgtgg atgcatctct catcaagtct gcatcaaaaa cctcatttgc
180

ccactccctct ttgacaactg aggcaaccc a ctgaggcaaa tctagtc catagacac
240

cccaggtgat ttcctcgta ggagttctaa caagataaca ccaagactgt agatatcagt
300

tttagtgttt gctttcttga gctttgagag ctcaggtgcc cggtatccca atgctccagc
360

ttagctatc acgttggaaat tagcagcagt tgacatcaac ccgagaaaga ccaaaatctg
420

caattttagc atttgttattc tcatcaagca acacattgct ggatgtgagg ttccatgtt
480

tgatgttctc ctggaaatga aggcaaca agccacggcc aagcttggct atttcatttc
540

tgtggccaaat caatgaatgg tcat
564

<210> 111
<211> 456
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 111
actatgagga cagaaaaagg agtccctcca gttgctggtg gtgatgttga agcgggtgg
60

gaggctggag ggaaaactagt ccattttgat ggaccaatgg ctttacagc tgatgttctc
120

ttgtgtcaa cagctgagat catggaaag agcacctatg gaactgttta taaggctatt
180

ttggaggatg gaagtcaagt tgcagtaaag agattgaggg aaaagatcac taaaggtcat
240

agagaatttgc aatcanaagt cagtgttcta ggaaaaatttacacccaa tgttttgg
300

```

ntgaggccta ttacttggga cccaaagggg aaaagctnt ggttttgat tcacgtntaa
360

aggaagtctt gcttnnncc tacatggnaa gttcgggc tgtcttnat taanggtngg
420

gngngctgnn tttaattata atnngngtt tacctt
456

<210> 112
<211> 592
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 112
actatgagga cagaaaaagg agtccctcca gttgctggtg gtgatgttga agcaggtggg
60

gaggctggag ggaaaactagt ccattttgat ggaccaatgg cttttacagc tcatgtatctc
120

ttgtgtgcaa cagctgagat catggaaag agcacctatg gaactgttta taaggctatt
180

ttggaggatg gaagtcaagt tgcagtaaag agattgaggg aaaagatcac taaaggtcat
240

agagaatttg aatcagaagt cagtgttcta ggaaaaatta gacaccccaa tgtttggct
300

ctgagggcct attacttggg acccaaaggg gaaaagcttc tggttttga ttacatgtct
360

aaaggaagtc ttgcttcttt cctacatggt aagttcgtg tgctgttctt tcattaagtg
420

ttgggtgtgc tggctttaa ttataatttg gagtttacct tannaatctg gataattcta
480

atcggagaac agncaaaca aancctaag gaacaaccct tancttaat atccatatca
540

ataagngaan tatttcttgg tcacatgtat gcaggggggg gnactgaaca tt
592

<210> 113
<211> 460
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 113

gggactggct gtgactgatc tctctggct aatctttcc agctgctgga gaacttgatg
 60
 aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtgtt
 120
 tagcaactcg tcgccaactg tggatgcattc tctcatcaag tctgcatcaa aaacctcatt
 180
 tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
 240
 caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgtagatatc
 300
 agtttttagtg tttgctttct tgagcttga gagctcaggt gcccggatc ccaatgcttc
 360
 agctgttagct atcacgttgg aattagcagc agttgacatc aaccgagaaa gaccaaaatc
 420
 tgcaattta gcatttgnat tctcattaaa caacacaatg
 460

<210> 114
 <211> 566
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 114
 gggactggct gtgactgatc tctctggct aatctttcc agctgctgga gaacttgatg
 60
 aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtgtt
 120
 tagcaactcg tcgccaactg tggatgcattc tctcatcaag tctgcatcaa aaacctcatt
 180
 tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
 240
 cncccccaggt gatttcntcg ttaggagttt taacaagata acaccaagac tgtagatatc
 300
 agtttttagtg tttgctttct tgagcttga gagtttaaggg ncccgantc ccanngntcn
 360
 agttgnagtt atancgttgg aattagcagn agttgcntca accgaaaaag accaaaatct
 420
 gaatttttagc atttgtttt catcaagcaa cacattgntg gatgngaggt cccatgtatg
 480

atgttctcct gggaatgaag gcaaacaaggccggggcaag gcttgggcta tttaatcct
 540

tggtggccaa acaatgaaag gttnat
 566

<210> 115
 <211> 16
 <212> DNA
 <213> soybean
 <400> 115
 gactgcgtac caattc
 16

<210> 116
 <211> 16
 <212> DNA
 <213> soybean
 <400> 116
 gatgagtcct gagtaa
 16

<210> 117
 <211> 22
 <212> DNA
 <213> soybean
 <400> 117
 gggtttcaga taaccgtggt cg
 22

<210> 118
 <211> 25
 <212> DNA
 <213> soybean
 <400> 118
 ttgcagatat tttagttgat tggcc
 25

<210> 119
 <211> 24
 <212> DNA
 <213> soybean
 <400> 119
 agttgattgg ctcaaaccat ggcc
 24

<210> 120
 <211> 20
 <212> DNA
 <213> soybean
 <400> 120

ttgcgtgtga tcggattac
20

<210> 121
<211> 20
<212> DNA
<213> soybean
<400> 121
tacctgagtt ctctcaagtc
20

<210> 122
<211> 252
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 122
gattnagact ggcgtgactn tcaaaggaga ctggaatttc tccactgaaa ttattcagtg
60

acaaatcaag ctgcctaagc gagaaatgt ttgcaatgct tgaaggaata tgtccactaa
120

attggtttct actcaaaatc agaacagaaa gattacgcaa tctacctaaa ctttgaggga
180

tttattgtc aaggaggttg ttctctgcat tcagcagtgt aagtgaggat aaatttagaga
240

gggttagcagg ca
252